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Valley Seed Co.

22nd Annual
Seed Catalog

Vegetable
Seed Trials



1931

OLDEST SEED HOUSE IN SACRAMENTO

How to Order Vegetable and Agricultural Seeds

HOW TO ORDER—Write your Name, Postoffice and County plainly.

AT PRICES QUOTED IN OUR CATALOG we deliver everything listed (except insecticides, fertilizers and fruit trees) at your railroad station or postoffice. We pay the freight, express, or postage, reserving the right to send the goods to you the cheapest way. All small packages will be mailed.

REMITTANCES should be made by Postoffice or Express Money Order, or by Exchange on Sacramento, New York or San Francisco. Personal checks will be accepted.

KEEP A COPY OF YOUR ORDER—Check goods received with this copy. Sometimes items are sold out, or will follow later, in which case a slip is enclosed with the other goods, or notice sent. In case of error, notify us immediately, that correction may be made.

NON-WARRANTY—All seeds offered in this Catalog have been carefully grown, selected and cleaned, and therefore we believe them to be first-class; however, there are so many contingencies in the growth of plants from seed and in setting out the plants, and over which we have no control, that the success in planting is not altogether dependent on the seed or plants; therefore, the Valley Seed Company gives no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned.

Index to Vegetable and Agricultural Seeds

Page	Page	Page	Page
Alfalfa .....23	Collards 6	Leek .....10	Quantity Seeds to
Alsike .....24	Corn, Field .....3, 9	Lettuce .....11, 12	Acres .....3rd cover
Artichoke 1	Corn, Pop 9	Mangels .....3, 4	Radishes .....17, 13
Asparagus 1	Corn, Sweet .....3, 9	Muskmelons .....13	Rape .....24
Beans .....1, 2, 3	Cover Crops.....24, 25	Mustard .....18	Rhubarb .....19
Beets .....3, 4	Cress .....10	Nitragin .....43	Rutabaga .....20
Bird Remedies.....25	Cucumbers .....9, 10	Okra .....12	Salsify .....19
Bird Seed .....25	Dandelion .....11	Onions .....14	Spinach .....16
Broccoli 5	Eggplant .....11	Onion Sets.....14	Spray Pumps.....41, 42
Brussels Sprouts..4, 5	Endive .....10	Oyster Plant.....19	Squash .....18, 19
Cabbage .....5, 6	Farm and Grass	Parsley .....16	Stim-U-plant.....42
Cardoon 7	Seeds .....22, 23, 24, 25	Parsnips .....20	Sudan Grass .....24
Carrots .....7, 8	Fertilizers .....43	Peanuts .....15	Sunflower .....24
Cauliflower 6	Grasses .....21, 22	Peas .....15	Tomatoes .....19
Celery 7	Gumbo .....12	Peppers .....15, 16	Turnips .....19, 20
Celeryiac 7	Herbs .....20	Planting Table.....48	Vegetable Plants
Chard, Swiss .....4	Insecticides .....40, 41	Plants, Vegetable..46	and Roots.....46
Chervil 6	Kale .....11	Potatoes .....25	Vetch .....25
Chicory 6	Kohl-Rabi .....11	Pumpkins .....17	Watermelons .....12
Chinese Cabbage.. 7	Labels .....47		Wax, Grafting.....47
Chives 7			Weight Seeds per
Clovers .....22, 23, 24			Bushel .....3rd cover

Index to Flower Seeds

Page	Page	Page	Page
Acroclonium .....26	Coix .....28	Hop, Japanese.....33	Pinks .....30
Adonis .....26	Coleus .....29	Humulus .....33	Plants, Flower.....43
Ageratum .....26	Columbine .....30	Hunnemannia .....32	Planting Calendar..45
Agrostemma .....26	Coreopsis .....27	Indian Shot.....27	Poor Man's Orchid..37
Alyssum .....26	Cosmos .....29	Ipomoea .....33	Poppy .....36
Amaranthus .....27	Dahlias .....30	Job's Tears .....28	Portulaca .....35
Annals, Mixed.....26	Daisies .....30	Joseph's Coat.....27	Pyrenthrum .....36
Antirrhinum .....30	Delphinium .....30	Kochia .....33	Rheda .....34
Aquilegia .....30	Devil-In-the-Bush 35	Lantana .....33	Rhodanthe .....37
Asparagus Fern ..27	Dianthus .....30	Larkspur .....33	Ricinus .....37
Asters .....26	Digitalis .....30	Lathyrus .....33	Rose of Heaven .....40
Australian Pea ..27	Dolichos .....30	Lavender Sea.....33	Rose Moss .....35
Balloon Vine .....27	Eschscholtzia .....30	Linum .....33	Sage, Flowering.....37
Balsam .....27	Feverfew .....34	Lobelia .....33	Salpiglossis .....37
Balsam Apple.....27	Flax .....33	Lupin .....34	Salvia .....37
Bean, Hyacinth.....30	Floss Flower.....26	Marigold .....34	Scabioseaa .....37
Bean, Scarlet Rnr..27	Flower Garden	Matricaria .....34	Schizanthus .....37
Bellis .....30	Calendar .....45	Mignonette .....34	Smilax .....37
Calendula .....34	Flower Seeds for	Mimulus .....34	Snapdragon .....27
Calliopsis .....27	Special Purposes..44	Mina .....34	Statice .....38
Campanula .....28	Flowering Plants..48	Momordica .....27	Stocks .....37
Canary-Bird Flwr..27	Forget-Me-Not .....31	Moonflower .....33	Strawflower 26, 32, 37
Candytuft .....27	Four o'Clock .....31	Morning Glory.....33	Summer Cypress.....33
Canna .....27	Foxglove .....30	Mourning Bride..37	Sunflower .....39
Canterbury Bell..41	Gaillardia .....31	Myosotis .....37	Sweet Peas .....38, 39
Carnations .....28	Geum .....31	Nasturtiums .....34	Sweet Rocket .....39
Castor Bean .....37	Glaudiolus .....31, 32	Nemophila .....35	Sweet William .....39
Celosia .....28	Godetia .....32	Nicotiana .....35	Thunbergia .....39
Centaurea .....28	Golden Feather.....36	Nigella .....35	Tritoma .....39
Cheiranthus .....40	Gourds .....32	Pansies .....35	Verbena .....40
Chrysanthemums ..28	Gypsophila .....32	Passion Flower.....35	Vinca .....39
Clarkia .....28	Helianthus .....39	Pea, Everlasting.....33	Viola .....40
Clematis .....28	Helichrysum .....32	Pea Vine, Austr'n..27	Violets .....40
Cilanthus .....29	Helitrope .....32	Pentstemon .....35	Viscaria .....40
Cobaea .....28	Hibiscus .....32	Petunia .....36	Wallflower .....40
Cockscomb .....28	Hollyhock .....33	Phlox .....35	Zinnia .....40

NURSERY DEPT.—ROSES 46-47; FRUIT TREES, NUTS AND BERRIES 47

VEGETABLE SEED DEPARTMENT

Artichoke

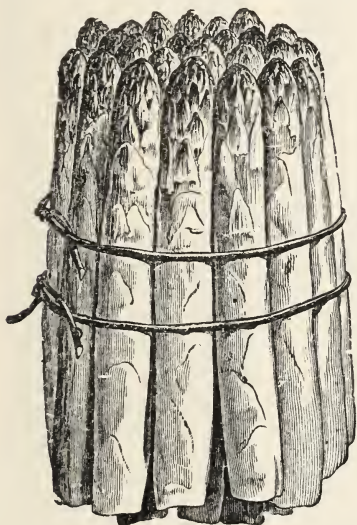
One ounce will sow 100 feet of row and will produce about 500 plants. The seed should be sown thinly in drills. When large enough, transplant to permanent rows 5 or 6 feet apart each way.

As there is a good deal of variation in plants grown from seed, it is advisable to set out plants from old stocks of a good type. In commercial growing it seems to be the general practice to set out divisions of the stool or suckers detached from the root crown. These sprouts should be set out in the early part of the year, and they will bear the same year if their growth is promoted by frequent watering.

IMPROVED LARGE GREEN GLOBE— This is the finest grained and without question the best of the Globe class. The plants we offer are of this variety. Pkt. 10c, oz. \$1, lb. \$10. (See "Vegetable Plants and Roots," page 46.)

Asparagus

One ounce will sow 50 feet of row, and produce about 800 plants. Sow seed early in Spring in drills 12 to 14 inches apart, and



Palmetto Asparagus

when well started thin out to 3 inches apart. When one or two years old, transplant into permanent beds, thoroughly trenched, 2 feet or more in depth. Set the plants in rows 2 feet apart, and not less than 18 inches apart in the row. Care should be taken that the roots are well spread and set at a depth of 6 inches below the level of the bed. Cover only 2 or 3 inches, and fill in gradually as the plants grow. Very little, if any should be cut the first year after transplanting, but a fair crop can be cut the second year. Every Fall, after the tops have been cut down, apply a dressing of coarse manure, and in the Spring fork it in. An occasional top-dressing of salt at the rate of $\frac{1}{2}$ pound to the square yard is also beneficial and keeps down the weeds.

PALMETTO—A large, early variety, of a

deep green color. Regular and even in size. Pkt. 10c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.

As Asparagus takes so long to grow from seed, it is advisable for the house gardener to set out the roots. In early Spring we can usually furnish two-year-old roots of the Palmetto variety, which is the most popular in the Sacramento River district, the greatest section in the world for growing Asparagus. Roots \$2.00 per 100. Special price on large lots furnished on application.

Beans

Beans should not be sown until frost danger is over, and for a continuous supply, should be planted every three or four weeks until August.

Plant the Bush varieties in rows 2 feet apart and 3 inches apart in the rows. One pound of seed will plant 100 feet of row, and 40 pounds will plant an acre.

Plant the Pole type 4 feet apart in hills, set a pole firmly in each hill and put five or six beans in a hill, covering the seeds 1 to 2 inches. One pound will plant 100 hills and 25 pounds will plant an acre.

The common enemy to beans is the Red Spider. This seems to bother the Kentucky Wonder particularly. The only treatment that we know of and can recommend is dusting with dry sulphur and start early.

Green-Podded Dwarf Beans

BURPEE'S STRINGLESS GREEN-POD — This variety seems so much better than any other sort we know of that we do not care to stock any other Dwarf Green Bean. This Bean is very early, hardy and absolutely stringless. The pods are a rich green, round,



Stringless Green-Pod

straight and about five inches long. The green bean is solid and meaty and readily marketed because of their handsome appearance. Pkt. 10c, lb. 50c, 10 lbs. \$4.50.

Wax or Yellow-Podded Dwarf Beans

10 lbs. at 45c per lb.

IMPROVED PROLIFIC BLACK WAX—In every respect first class; pods nearly round, of a beautiful bright yellow color, hanging in clusters well up from the ground; very early and continues long in bearing which, with its immense productiveness and handsome appearance, makes it everywhere popular. The old Prolific Black Wax was popular a few years ago, and this improved strain surpasses it in all respects. Pkt. 10c, lb. 50c.

IMPROVED GOLDEN WAX—Rust-proof. An improvement on the Golden Wax, being entirely rust-proof and standing the drought remarkably well. Matures its crop in three days to a week ahead of the other varie-



Golden Wax Beans

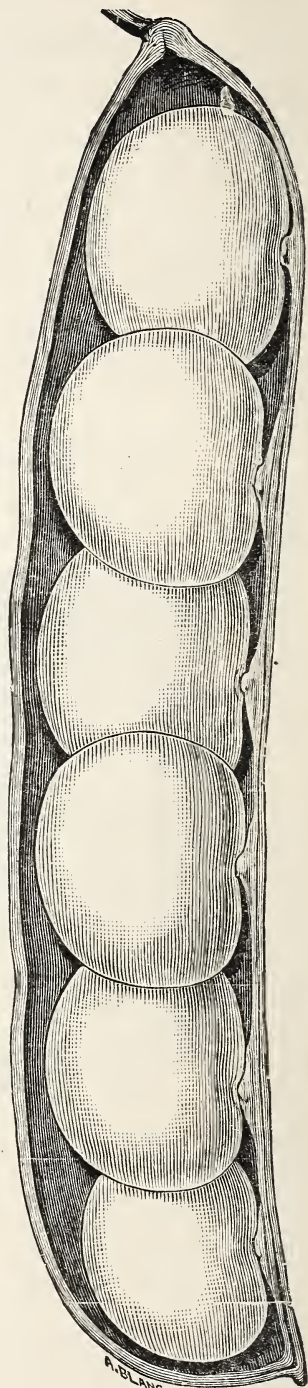
ties. Pods long, nearly straight, broad, flat; golden yellow, fleshy and wax-like; of the highest quality. If the beans are picked when young, they will be entirely stringless. Pkt. 10c, lb. 50c.

Lima Beans

10 lbs. at 30c lb.

BURPEE'S BUSH LIMA—The best known Lima Bean and it deserves its popularity. Possesses all the good qualities of the Lima Bean and does well throughout California. Pkt. 10c, lb. 35c.

KING OF THE GARDEN LIMA—A vigorous grower, bearing an abundance of large pods, varying in length from 5 to 8 inches, and containing from four to six perfect beans of superior quality. Pkt. 10c, lb. 35c.



King of the Garden Lima

FORDHOOK BUSH LIMA—Of the type of Dree's Bush Lima, which it most nearly resembles. Its height is from 22 to 24 inches, and bears its beans in clusters of two to five, well out from plant on long spikes. Three to five round, thick beans in each pod. Pkt. 10c, lb. 35c.

HORTICULTURAL, OR SPECKLED CRANBERRY—Popular; useful either green or dried. Pods are short, broad, pale green, usually streaked with bright red. In many cases this variety is fully as desirable as the Lima Beans. The vines are quite vigorous growers and produce many pods which are closely packed with beans. Pkt. 10c, lb. 35c, 10 lbs. at 30c per lb.

SCARLET RUNNER—Ornamental as well as useful; produces brilliant scarlet flowers and makes an elegant shade in the summer time. Vines are rapid growers, and will quickly cover a porch or trellis. The green pods are tender and sweet; the dry beans are used in the same way as Limas and by many are considered equal to Limas. Pods produce in large numbers, making easy picking, and are very prolific and dependable bearers in almost all locations. Will do well in any soil where other beans would thrive. Do not need particular care in the way of cultivation. Pkt. 10c, lb. 35c.

CHINESE, OR YARD-LONG BEAN—This celestial variety is green-podded, extremely long, of good quality and very tender. Pkt. 10c, oz. 20c, lb. \$2.50.

KENTUCKY WONDER, OR OLD HOME-STEAD—Enormously productive, the pods hanging in great clusters from top to bottom of pole, and are of a silvery green and entirely stringless; they cook deliciously tender and melting. Will do well in most any soil with reasonable moisture. Pkt. 10, lb. 35c, 10 lbs. \$3.00.

KENTUCKY WONDER WAX BEAN—It commences to bear when scarcely higher than the average bush variety and keeps on

producing until killed by frost. A rampant grower. Beans are solidly meaty, entirely stringless, and when cooked deliciously rich and buttery. The seed is brown and of fine quality. Plant from April to August. Pkt. 10c, lb. 40c, 10 lbs. at 35c per lb.

Beets For Table Use

One ounce will sow 50 feet of drill. Five pounds will sow an acre. Rich, deep, soil, not too recently manured, is best for this crop. Sow about 1 inch deep in drills 15 inches apart, and when well established thin the plants to 6 inches apart in the row. Beet seed can be planted any time of the year in this section. If the soil is inclined to be dry it is advisable to soak the seed in water twenty-four hours before planting. Unless there is more interest in the greens than in the roots it is advisable to thin early. If you do not thin until the greens are pretty good size the surviving beets never make quite proper development.

DETROIT DARK RED—Has rich red flesh and is a good keeper. It is the leading sort with our market trade.

CROSBY'S EGYPTIAN—Roots are flattened globe shaped, and particularly good for early use; bright, clear, red flesh; very popular.

EARLY ECLIPSE—This is an old favorite and very popular. It is bright red and fine grained. It is especially good for late planting.

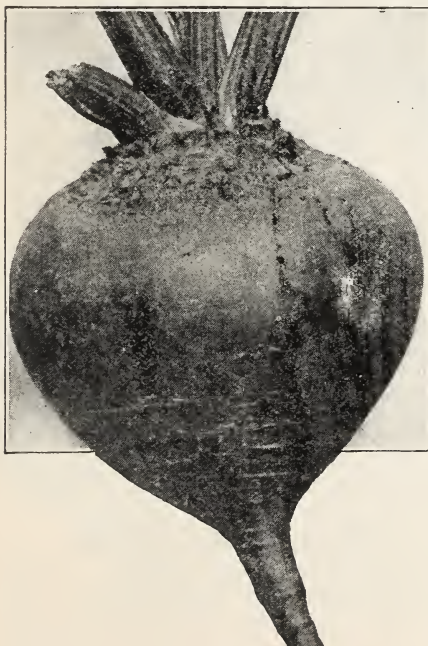
LONG SMOOT BLOOD—An old standard variety and recommended for slicing. It roots deeply and stands the drought well.

All the above

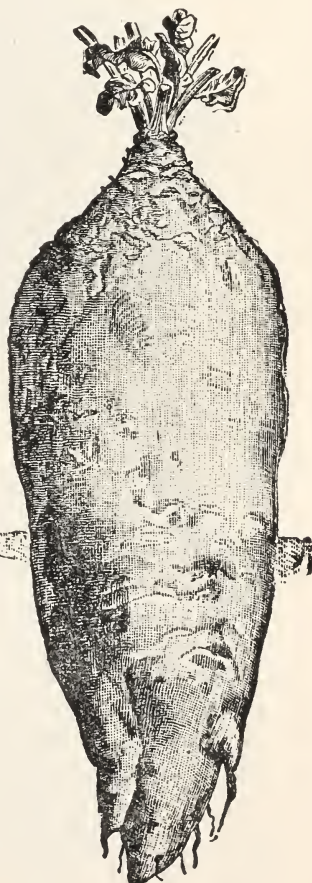
Beets are: Pkt. 5c, oz. 15c, 1/4 lb. 30c, lb. \$1.00.

Mangel-Wurzel

Five pounds will sow an acre. The seed should be planted in rows 2 feet apart and thinned to about 8 inches in the rows. To obtain the best results from this crop use deep soil, well plowed. If the soil is thin a liberal application of an honest chemical fertilizer is necessary. The value of beets for stock feeding cannot be overestimated.



Detroit Dark Red



Long Red Mangel

The results from their use are clearly shown in the improved health and condition of the animals, the increased yield of milk in cows and the great saving of hay. About one-fourth of the daily ration should be of these roots. They are also of value for feeding poultry. Time for planting Mangels, to have them reach their maximum size, is from February until June.

LONG RED—Our stock of this variety is the result of continued careful selection. The heaviest yielding Mangel, producing 40 to 80 tons per acre, many specimen roots weighing 40 to 50 pounds, fine texture and quality. Lb. 60c, 10 lbs. \$5.50.

to be the most profitable stock beet to grow. Will keep in good condition for a considerable period. Lb. 60c, 10 lbs. \$5.50.

Swiss Chard

Grown for its leaves only. It is one of the best early "greens". Cook leaves as you do spinach, and the stems in cream the same as asparagus. Leaves grow to an enormous size, and the stalks are generally 20 inches to 2 feet in length.

WHITE—The old favorite, with smooth leaves and huge stalks; excellent for cooking or pickling. Pkt. 5c, oz. 15c, ¼ lb. 30c, lb. \$1.



SELECTED GOLDEN TANKARD—Most nutritious variety in cultivation; roots large, ovoid, filled out to top and bottom, terminating with a small tap-root; flesh deep golden yellow, solid, crisp, sweet, rich; excels others in milk producing qualities, very productive. Has no superior as a keeper. Lb. 60c, 10 lbs. \$5.50.

GIANT HALF-SUGAR, ROSE TOP—A type of Sugar Beet yielding enormous crops and producing roots of giant size. They are very much easier to harvest than Sugar Beets, and may be turned out by a push of the foot. This variety is considered by many

LUCULLUS—Grows the same as the white variety but the leaves are savoyed, or curly. By many it is considered superior, and it usually sells more easily. Pkt. 5c, oz. 15c, ¼ lb. 30c, lb. \$1.

Brussels Sprouts

This seed should be sown in the Spring and the plants cultivated like cabbage. However, they take considerably longer than cabbage, and must have abundance of moisture all Summer. The sprouts appear first at the lower part of the stem and appear later

above, thus giving many cuttings from the same stem.

One ounce of seed will produce 1000 plants. Set the plants in rows $2\frac{1}{2}$ feet apart and 2 feet apart in the rows.



Improved Dwarf

IMPROVED DWARF—This is the variety mostly grown. Pkt. 10c, oz. 30c.

In the Spring we usually have these plants at 25c per dozen.

Broccoli

This plant is very similar to Cauliflower, but more hardy and it is very satisfactory to grow in cool Northern localities. For warm and dry localities we do not recommend it. One ounce will produce 1000 plants and will mature in about 110 days. Sow the seed in a bed and transplant to rows $2\frac{1}{2}$ feet apart and $1\frac{1}{2}$ feet apart in the rows and cultivate like cabbage.

LARGE WHITE CAPE—Creamy white and compact; sure to form; splendid quality. Pkt. 10c, oz. 50c.

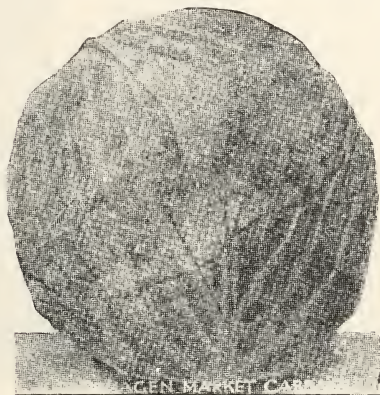
Cabbage

While seed may be planted almost any

time of the year, there are three seasons that are preferable—September for early Spring Cabbage; from January to April for Summer Cabbage, and from July to August for Winter Cabbage. Cabbage matures in from four to six months. The early or smaller varieties mature in a shorter time. Transplant when the plants are about six weeks old, placing the plants 18 inches apart in rows 3 feet apart. To prevent the heads from splitting open before they are ready to be harvested the plants should be loosened a little at the roots. Cabbage requires plenty of moisture, but too much water causes them to rot readily. If the growth is checked the seed heads mature and burst forth as soon as moisture is again applied. It is for this reason that so much Cabbage bolts to seed. Furthermore, should there be a cold spell at the time Cabbage begins to head, you may expect quite a percentage of your crop to shoot to seed.

EARLY JERSEY WAKEFIELD—One of the earliest Cabbages and very popular. It makes up in earliness for any lack of size. Heads pyramidal, having a blunted or rounded peak.

MAMMOTH RED ROCK—The largest and most reliable Red Cabbage; round, solid heads of deep red.



COPENHAGEN MARKET—This variety seems the best for all conditions. A second-early sort, fine round heads of medium size, averaging from 8 to 10 pounds.



Flat Dutch

LATE FLAT DUTCH—This is superior to any other late Cabbage in cultivation. It is a sure header, very solid and firm, and a splendid keeper.

SAVOY GREEN GLOBE—Heads are large and rather loose, but being very tender and of a pleasant flavor, the whole head can be used for cooking; leaves are very wrinkled and dark green.

All the above Cabbage Seed: Pkt. 10c, oz. 35c, ¼ lb. \$1.25, lb. \$4.

Cauliflower

One ounce will produce 2000 plants. The cultural directions given for cabbage will apply for this crop, but the soil should be more heavily manured. Keep the ground well hoed, and bring the earth gradually up to the stems. Water freely in dry weather, and especially when they begin to head. Never allow the plants to become crowded in the seed bed; transplant them with great care, as any check will injure, if not entirely prevent, the formation of the head. For late Cauliflower set the plants in a cool, moist place in the garden. When the heads should be formed, the long leaves should be drawn over and tied above them, to keep off the hot rays of the sun. Some gardeners break the leaves over the heads, but this is not entirely effective.

EARLY SNOWBALL—This is the best early strain that we know of for this section. It makes uniform heads that are perfectly white and of fine texture. This early variety is usually the one that shows the big profit to the market gardeners, out in handling this sort, care should be taken to avoid blighting by exceedingly hot weather. During these times water should be applied abundantly, followed by proper cultivation to prevent baking. Pkt. 15c, ¼ oz. \$1, oz. \$3, lb. \$30.

DANISH DRY WEATHER—We have been selling this variety to market gardeners in the Sacramento Valley for several years. The general satisfaction it has given convinces us that it is the surest heading sort for this locality. It is not as early as the Early Snowball, but just as fine texture. It has exceedingly large leaves which form an excellent protection for the heads. Every market grower should plant some of this sort. The most satisfactory time for planting Cauliflower seed in the Sacramento Valley is during May and June. Pkt. 15c, ¼ oz. \$1, oz. \$3, lb. \$30.

VETCH'S AUTUMN GIANT—A distinct and valuable late variety, producing large heads, pure white, firm and compact, which, being thoroughly protected by the foliage, remains a long time fit for use; a desirable variety for the south, as it is able to withstand the high temperature and hot sun. Pkt. 10c, oz. 75c.

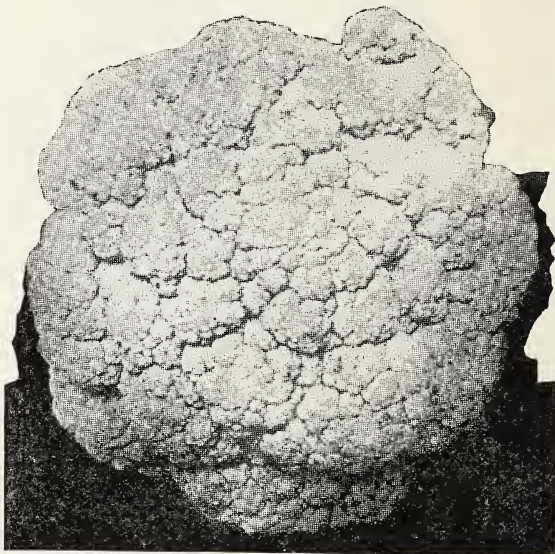
Chervil

An aromatic, sweet herb. The young leaves are used in soups and salads. Pkt. 10c, oz. 15c, ¼ lb. 30c, lb. \$1.

Collards

A plant bearing a large mass of leaves on the top of a stout stalk. It is a species of cabbage, and the flavor is the same. It bears leaves all through the winter, and is used especially in the South for cabbage greens. Young plants may be started in boxes in early Spring, and the young plants transplanted, allowing plenty of room for each plant.

TRUE GEORGIA COLLARDS—The well-known, very large variety. Grows from 4 to 5 feet high, and forms a very large, loose head. Leaves are tinged with purple. Pkt. 10c, oz. 15c, ¼ lb. 30c, lb. \$1.



Early Snowball

Chicory

SMALL ROOTED, OR RADICHETTA—Used for the leaves only. Pkt. 10c, oz. 50c, ¼ lb. \$1.50, lb. \$5.

LARGE ROOTED, OR MADGEBURG—This is the Chicory of commerce and used as an adulterant of coffee.

The so-called Witloof or French Endive can be produced from the large rooted variety above by method of growing, and we suggest the following culture: Sow seed not later than May, plants standing about 4 inches apart in rows 18 inches apart. The long parsnip shaped roots should be lifted in the Fall, cutting off the leaves about 1½ inches above the neck, and shortening the roots by cutting off the bottoms to within 8 inches of the neck. When want-



Witloof

ed for forcing these roots should be planted in a trench about 18 inches deep and placed upright about 2 inches apart, allowing the neck of the root to come within about 9 inches of the top of the trench. The trench should then be filled with light soil. By this method it requires about a month to 6 weeks to force the roots and the heads are cut off with a small part of the neck of the root attached. Pkt. 10c, oz. 40c, $\frac{1}{4}$ lb. \$1.35, lb. \$4.

Chinese Cabbage

Culture—Grow it as you do lettuce; transplant 10 inches apart in rows 12 inches apart. Plant from September 1 till February 1.

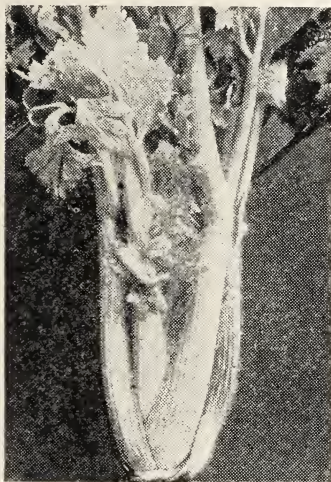
Boiled with beef or pork it is excellent, having a much more pleasing flavor than cabbage. The inner leaves make a better cold slaw. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, $\frac{1}{2}$ lb. \$2.50, lb. \$5.

Cardoon

This should be treated the same as celery, but at period when blanching becomes necessary, different treatment is required. The tying up should be done on a fine day, when the foliage is quite dry and great care used to see that the blanching material covers all but the tops of the plants. Pkt. 10c, $\frac{1}{2}$ oz. 25c, oz. 40c, 2 oz. 75c, $\frac{1}{4}$ lb. \$1.25.

Celery

One ounce will produce 5000 plants. Sow in light, rich soil, in shallow drills, and cover the seed lightly with finely sifted mould.



Golden Self-Blanching Celery

Prick the seedlings out into beds of very rich soil 3 inches apart. Water freely and shade from sun until established. When the plants are 5 to 6 inches high, transplant to rows 3 to 4 feet apart, according to the variety, allowing 8 inches between the plants in the rows. Cutting off the tops as well as part of the roots makes the plants stocky. Cultivate freely and earth up to blanch the stems, pressing the soil firmly around the plant almost to the top, care being taken not to cover the tops of center shoots. Remember that this crop well repays generous treatment and that good, uniform Celery cannot be grown without care. Celery is a gross feeder, therefore the soil should be made rich

with well-rotted manure, thoroughly mixed in the soil before the plants are set.

WHITE PLUME—The inner leaves and heart are naturally white. The outer leaves are green tinted while growing, and very quickly after "earthing up" they blanch to a pure snowy white. Valuable for its earliness. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb. \$1, lb. \$3.50.

GOLDEN SELF-BLANCHING—We are now offering only California grown seed of Golden Self-Blanching Celery, as we feel that it is fully up to the improved French strain of this variety. Also we are recommending the new type of this variety, which is a taller plant than the old dwarf type. This new type is perhaps a month earlier and bleaches easier and whiter. Pkt. 10c, oz. \$1, $\frac{1}{4}$ lb. \$3, lb. \$10.

Celeriac or Turnip-Rooted Celery

This vegetable is used principally for flavoring soups and stews, but may be served like the cauliflower, or as a salad.

Sow seed same as celery, transplant into rows 2 feet apart and about 6 to 8 inches in the row. No earthing up required, as the roots are the edible portion of the vegetable. For Winter use pack in damp sand or earth in cellar, or cover with straw and earth outside. Handled in this way they will keep a long time.

LARGE, SMOOTH PRAGUE—This is an improved form of the turnip-rooted Celery. Roots large, round and smooth, and free from side roots; a profitable variety for market gardeners. Pkt. 10c, oz. 30c, $\frac{1}{4}$ lb. \$1, lb. \$3.

Chives

A plant resembling a tuft of grass, but the leaves have the flavor of onions. The leaves are used in soups and salads. Perfectly hardy in open ground. Pkt. 10c. (See plants of Chives, listed under "Vegetable Plants and Roots," page

Carrots

One ounce will sow 150 feet of drill; 3 pounds are required for an acre. The most suitable soil is a rich deep, sandy loam, not too recently manured. Sow seed rather thinly in drills 12 to 15 inches apart, according to the sorts, thinning out to 6 or 7 inches. In field culture the rows should be at least 2 feet apart, so that the crop can be worked with the horse cultivator.

DANVERS HALF-LONG—The best variety for general crop; is rich orange color, a very heavy yielder and splendid keeper; first-class Carrot for all soils, and valuable for both table and stock. We have an extra fine strain of seed of this favorite sort. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

IMPROVED LONG ORANGE—This is a decided improvement over the ordinary Long Orange. The roots grow remarkably uniform and smooth, being always well formed and of larger size, better flavored and of deeper orange color. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

OX HEART, OR GUERANDE (Stump Rooted)—This new French Carrot is one of the most valuable of all recent introductions, either for family use or market. It is an intermediate between the Half-Long and Horn varieties, attaining a diameter of 3 to 4 inches at the neck, of the most beautiful shape and rich orange color. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

CHANTENAY—The finest in color, the best in form and the most productive of all

the stump-rooted varieties. Of fine flavor, either in soups, stews or boiled. For ordinary feeding purposes it meets all requirements, as it keeps well, crops well and can be used more economically than any other. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.



Chantenay Carrot

EARLY SCARLET HORN—This is a favorite for early crop, but not large; sold extensively in the markets bunched. The tops are small; roots top-shaped, stump-rooted, therefore easily pulled. Grows well in shallow soil. Color a deep orange; flesh fine grained. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

EARLY FRENCH FORCING—The earliest and sweetest of all varieties; does well under glass. Popular both as a market and home variety. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

HALF LONG SCARLET NANTES, OR STUMP-ROOTED—This is an early half-long variety, has small top and is excellent for the home garden or market. The roots are smooth, cylindrical and of a bright orange color. This is one of the most handsome of the medium sized Carrots, and the mature roots are usually from 5 to 6 inches long. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Sweet Corn

How often one will hear the remark that good corn cannot be procured in the market. That is only too true. To get the sweetest flavored corn it must be home raised, and all varieties of Sweet Corn are really sweet where it is possible to cook it within an hour or two after picking.

To have Sweet Corn at its best the ears should be picked when the kernel may be easily punctured with the thumb nail. To have a supply throughout the season you should arrange to make successive plantings about every two weeks, from the first of March until the latter part of July. After the 1st of August we believe it is too late, as a rule, for any section of the Sacramento and San Joaquin Valleys to plant even the quickest maturing sorts.

One pound will plant 100 hills, 12 pounds will plant an acre. Sweet Corn is planted in drills, allowing the plants to stand about a foot apart. However, the usual custom with Sweet Corn is to plant in hills 3 feet apart each way, thinning to three plants in a hill. With field corn the practice is to have the hills 4 feet apart each way.

Please note that corn should not be planted in single rows, as pollination is apt to be only partial, and ears scantily filled. When Sweet Corn begins to silk, irrigate thoroughly and keep the ground moist until all the corn is picked. This fills out the kernels and rushes the corn so fast that worms, which hatch in the silk, will not have time to work very far down the ear.

GOLDEN BANTAM—We do not believe that there is any corn in cultivation at present time that compares with Golden Bantam. It is very early, dwarf and produces two or three medium sized ears to the stalk. The seed, when fully ripe, is orange-yellow. However, it should be picked before this yellow hue is pronounced, but even though it is permitted to ripen fairly well, it is still of very sweet flavor. As a market sort it has not been popular because of color, but when it becomes better known the color will not interfere with its sale, and we predict it will some day lead as a market variety. Pkt. 10c, lb. 40c, 10 lbs. \$3.

EARLY EVERGREEN—Distinctly earlier than Stowell's Evergreen, almost as prolific, and of as good a quality. It is today one of the best main crop varieties. Pkt. 10c, lb. 35c, 10 lbs. \$3.

EARLY MAMMOTH OR ALAMEDA SWEET CORN—This variety has been so generally grown in Alameda County that it is now better known on this coast as Alameda Sweet Corn than by its original name, Early Mammoth. The ears are long, very large and well filled with 10 to 14 rows. The variety is medium early. Pkt. 10c, lb. 35c, 10 lbs. \$3.

COUNTRY GENTLEMAN—One of the finest of all corns for the private table. Ears 8 or 9 inches long, cob small and irregularly crowded from end to end with pearly white kernels of great depth; quality surpassingly sweet and tender. An excellent market variety where irregular grained corn is in demand. Pkt. 10c, lb. 35c, 10 lbs. \$3.

STOWELL'S EVERGREEN—Now recognized everywhere as a standard variety, both for home use and market, and is the general favorite. The ears are of a large size, grains deep, exceptionally tender and sugary, and remain longer in the green state than any other. Probably the best late sort. Pkt. 10c, lb. 35c, 10 lbs. \$3.

BLACK MEXICAN—Rather short, black; sweet, delicious; fine for home garden, but not for market on account of color. Pkt. 10c, lb. 35c, 10 lbs. \$3.

Field Corn

For Larger Quantities Write For Prices.

EARLY LEAMING—Yellow dent; ripens in from 90 to 100 days. Ears good size, with deep, large grains; orange color, red cob. Lb. 20c, 10 lbs. \$1.



IOWA GOLD MINE—A large yellow dent variety, maturing in 100 days. Lb. 20c, 10 lbs. \$1.

IOWA SILVER MINE—Standard white dent; superior for feeding; makes good roasting ears when young. Lb. 20c, 10 lbs. \$1.

REID'S YELLOW DENT—(100 days)—Ears medium size, remarkably uniform in size and of a slight yellow color, with a deep grain and small red cob. Best for shredding, as it shatters least of any. A sure cropper and a very reliable variety in all respects. Lb. 15c, 10 lbs. \$1.

AUSTRALIAN WHITE FLINT—A 90-day variety and ideal for our arid lands. Will endure more drought and cold than any other variety. Ears about 12 inches long. Lb. 20c, 10 lbs. \$1.

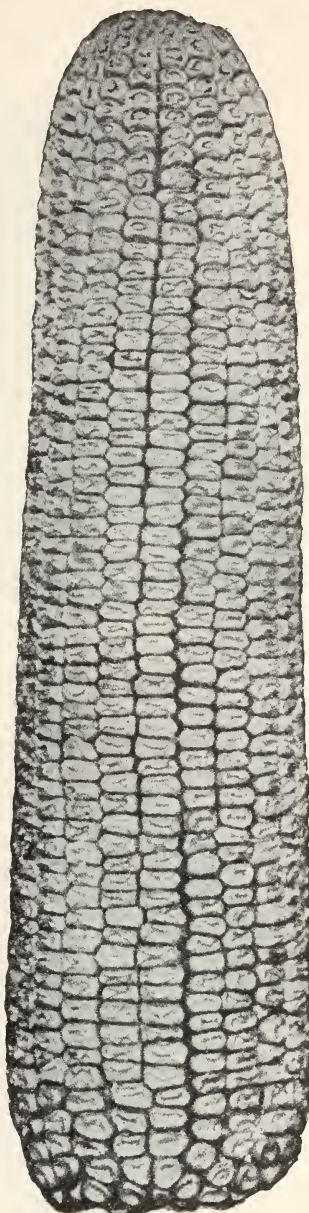
YELLOW FLINT (sometimes called Yellow King Philip, or Ione)—Many believe this to be the best corn for California. It is acclimated, and the seed we offer locally grown. The leaves are large and wide, making it a good silo corn. Lb. 20c, 10 lbs. \$1.

Pop Corn

WHITE RICE—Handsome variety; matures later than other varieties, but yields heavily and "pops" fine; kernels are long, pointed and resembling rice; color white. Very prolific. Lb. 30c, 10 lbs. \$2.50.

Cucumbers

One ounce will plant 100 hills; 2 pounds will plant one acre. They succeed best in a warm, rich, moist, loamy soil. Plant in hills 4 feet apart each way. Leave four of the



Early Leaming

strongest plants to each hill, but do not thin out until plants are strong. Frequent gathering of the Cucumbers as they reach satisfactory size is essential to the long bearing of the vines.

WHITE SPINE — (Peerless) — The most uniform and shapely variety grown. It is an early, prolific and continuous bearer, of very fine, large, smooth, straight fruits. Pkt. 5c, oz. 15c, ¼ lb. 40c, lb. \$1.00.

CHICAGO PICKLING—This is probably the most common variety listed for pickling purposes, and produces a fine quality of fruits. Pkt. 5c, oz. 15c, ¼ lb. 50c, lb. \$1.50.

IMPROVED LONG GREEN—A standard sort, producing long, straight, smooth fruits, sometimes growing 18 inches in length. The flesh is fine grained and of the most refreshing and delicious flavor. Pkt. 5c, oz. 15c, ¼ lb. 50c, lb. \$1.50.



White Spine Cucumbers

JAPANESE CLIMBING—Fine to grow on the trellis. The vines are of healthy, vigorous growth, and throw out strong and grasping tendrils, which enable it to climb trellises or any other suitable support. The cucumbers are thick, exceedingly tender and of delicate flavor; flesh pure white; skin dark green, turning to brown, and netted when ripe. Pkt. 5c, oz. 15c, ¼ lb. 50c, lb. \$1.50.

LEMON CUCUMBER—This dainty little cucumber resembles a lemon, both in form and color, having a distinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for needs of the average family. Is also said that Lemon Cucumbers can be eaten without fear of the harmful results that some experience from eating cucumbers. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00

LONGFELLOW CUCUMBER—A handsome cucumber 12 to 14 inches in length by 2½ inches in diameter. Flesh white and firm with few seeds. In Eastern markets this Cucumber is bringing more money than any other variety, therefore, we believe that in a short while it will prove equally as popular in California markets. Pkt. 10c, oz. 25c, ¼ lb. \$1, lb. \$2.50.

Endive

One ounce will sow 150 feet of drill. Sow in any ordinary dry soil in drills 1 foot apart, covering lightly. When the plants are about 2 inches high, thin to about 12 inches in the row. When the plants have attained full size, gather up the leaves, tying together at the tips. The inner leaves, in the course of three or four weeks, will become beautifully blanched.

GREEN CURLED—Finely curled, dark green leaves; excellent plant. Not only most useful as a salad, but much used for garn-

ishing. Pkt. 5c, oz. 20c, ¼ lb. 40c, lb. \$1.25.

BROAD-LEAVED BATAVIAN (Escarolle)—The leaves are reasonably broad and nearly plain. It is used chiefly in stews and soups. Pkt. 5c, oz. 20c, ¼ lb. 40c, lb. \$1.25.

Leek

One ounce will sow 100 feet of drill. Succeeds best in a light, rich soil. Sow in drills 1 inch deep and 1 foot apart; when 6 or 8 inches high transplant in rows 10 inches apart, set deep so as to blanch the neck as much as possible.

AMERICAN LARGE FLAG—Of large, vigorous growth; best of all. Will become extremely large if planted in rich soil and cultivated frequently throughout growing season. Pkt. 10c, oz. 25c, ¼ lb. 75c, lb. \$2.50.

GIANT CARENTAN—A favorite European sort, of mild flavor. Pkt. 10c, oz. 25c, ¼ lb. 75c, lb. \$2.50.

Cress

Sow Curly or Pepper Grass thickly, in shallow drills, every two or three weeks. It should be cut often, and it will continue to grow. Used for salad and garnishing.

TRUE WATER CRESS—Should be sown in damp soil; or if a stream of water can be utilized, it would be much finer. It will also thrive well in damp hotbeds. To obtain early salad it is a good plan to sow with Water Cress a strip 4 inches wide on the margin of the hotbed, inside of the frame, where it is cool. Pkt. 10c, oz. 35c, ¼ lb. \$1, lb. \$3.50.

PEPPER GRASS (Pepper or Garden Cress)—A salad or garnishing plant very popular in Europe. It is one of the freshest and crispest of salad plants, of very simple cultivation. Taste slightly peppery. Of very rapid growth, yielding its crop in from three to four weeks. Pkt. 5c, oz. 15c, ¼ lb. 45c, lb. \$1.25.



Giant Carentan Leek

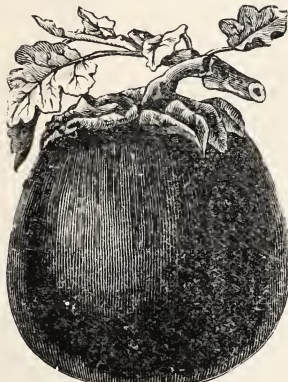
Dandelion

Much esteemed for greens, which are cooked like mustard and spinach. Sow the seed in May or June on good, rich soil, and thoroughly cultivate, when the leaves will be ready to cut the following Spring. An ounce will sow 200 feet of row.

IMPROVED LONG-LEAVED—The largest leaved and best cutting variety. Pkt. 10c, oz. 50c.

Eggplant

One ounce will produce 2000 plants. A strong, uniform heat is required to germinate the seeds, and a thoroughly pulverized, well-enriched, warm soil is necessary to perfect the fruit. Transplant to 3 feet apart each way, and when about a foot high support the plants by drawing the earth well up around the base of the stock.



Improved New York
Spineless Eggplant

IMPROVED NEW YORK SPINELESS—This is a great improvement on the popular New York Improved. The plant is low and branching and quite free from spines; fruit of large size and perfect form; two weeks earlier than the old variety; excellent quality and very productive. Pkt. 10c, oz. 75c, ¼ lb. \$2, lb. \$7.

EARLY LONG PURPLE—Early, hardy and productive; excellent for table. Pkt. 10c, oz. 60c, ¼ lb. \$2.

Kohl-Rabi

One ounce will produce 2500 plants. Sow in rows 18 inches apart, afterward thinning out to 8 or 10 inches. When young, Kohl-Rabi is a delicate and palatable vegetable, and is very popular in Europe, where it is more generally used than in America.

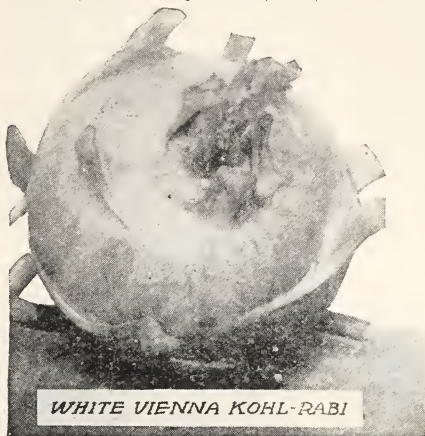
EARLY WHITE VIENNA—Tender, white flesh; very popular where grown. Pkt. 10c, oz. 30c, ¼ lb. 90c, lb. \$3.

Kale or Borecole

DWARF GREEN CURLED SCOTCH—Known in the East as "Sprouts," and sometimes confused with Brussels Sprouts, which it does not in the least resemble. The cultivation is about the same as for cabbage.

Four ounces of seed will sow 300 feet of row. Rarely exceeds 18 inches in height, but spreads under good cultivation to 3 feet in diameter; leaves beautifully curved and

bright green; very hardy and will stand out where temperature does not fall below zero. Pkt. 10c, oz. 15c, ¼ lb. 50c, lb. \$1.75.



WHITE VIENNA KOHL-RABI

TALL GREEN CURLED SCOTCH—Taller than the above. This and preceding variety make fine "greens" if properly prepared. Pkt. 10c, oz. 15c, ¼ lb. 50c, lb. \$1.75.

JERSEY, OR COW KALE—A robust growing sort, often 6 to 8 feet high, and grown largely for stock and chicken feed. Pkt. 5c, oz. 15c, ¼ lb. 30c, lb. \$1.00.

Lettuce

The seed should be covered very lightly to secure germination. When well started transplant to rows 18 inches apart and about 12 inches in the row. The seed may be plant-



Paris White Cos Lettuce

ed throughout the year in most localities in California, and will be mature in six to twelve weeks, according the variety and season of planting.

One ounce will sow about 200 feet of row, or about 2 pounds to the acre. In the preparation of a Lettuce bed, trenches should be dug about 6 inches deep and 2 feet apart. The custom is with most market growers to make shallow drills along the edges and both sides of the trench. When the plants are about 1 inch high, they are thinned to about 12 inches, generally by chopping out. It is also entirely satisfactory to transplant from beds to rows on the sides of the trenches. In irrigating, the water should run at the bottom of the trenches and then let it stand and sub-irrigate, being careful not to allow the water to cover the plants, as this brings on stem rot.



New York Lettuce

NEW YORK—This is the variety planted exclusively in the great fields now grown on the Pacific Coast. It also has been known by other names, such as Los Angeles, Wonderful and Neapolitan, but among seedsmen is generally known as "New York" Lettuce, as that was the name given it by a prominent New York seedsman 40 years ago. About 80,000 acres of this Lettuce was grown on the Pacific Coast in 1928, and about 50,000 refrigerator carloads were shipped to all parts of America.

New York Lettuce is a cool weather variety, and sections of this coast are chosen for maturity during cool weather as follows: Arizona plantings in September; Imperial Valley in October; Salinas and Pajaro Valleys in January and February, and July. Crops of this Lettuce in the Sacramento and San Joaquin Valleys are timed to come off in the Spring.

As the growing of Lettuce for market requires most careful farming, good seed, or rather the best seed, is demanded by the grower and shipper. The strain we offer of New York Lettuce, we believe to be the best ever produced. It forms a large, solid, round cabbage-like head that stands shipping better than any other variety. Pkt. 5c, oz. 20c, ¼ lb. 75c, lb. \$2.00.

ICEBERG—This is next to the New York or Los Angeles Lettuce as a market variety. It is fully as large as the New York type, but not quite so solid, though the leaves are compact and closely interwoven. The color is light green, lightly tinged with brown. It is more popular as a Summer Lettuce than for Winter. It is crisp and delicious. We recommend it as the best variety for the market grower to plant from the first of April until August. Pkt. 5c, oz. 20c, ¼ lb. 65c, lb. \$2.00.

COS VARIETY

PARIS WHITE COS—A popular old variety, growing to a large size, with long, con-

ical, compact heads, blanching well when tied. The leaves are tender and of fine flavor. Pkt. 10c, oz. 20c, ¼ lb. 65c, lb. \$2.

Okra or Gumbo

One ounce will plant 100 hills. Of easy cultivation in any good soil; plant about 2 inches deep, in drills 3 feet apart, and when well established thin to 3 plants in the hill; keep the soil well worked, and occasionally draw a little up around the stalks to support them. The green pods are used in soups and stews, and are very nourishing.

WHITE VELVET—Handsome and productive. Distinct in appearance; the large pods are perfectly round, smooth, an attractive velvety white, of superior flavor and tenderness; very prolific. Pkt. 5c, oz. 15c, ¼ lb. 25c, lb. 75c.

PERKINS MAMMOTH LONG POD—Dwarf; early and prolific. The pods are long, slender, deep green, and of fine quality. Pkt. 5c, oz. 15c, ¼ lb. 25c, lb. 75c.

Watermelons

One ounce will plant 25 to 30 hills; one pound will plant an acre. Treat as recommended for muskmelon, except hills should not be less than 8 feet apart.

KLONDIKE—If planting for market or home consumption we recommend the Klondike. The meat in this Melon is rich and bright red. Every produce dealer and storekeeper wants this Melon because it is the variety that consumers prefer. While the rind is not thick, it is sufficiently so to protect it in shipping. The strain we have of this seed is excellent. Pkt. 5c, oz. 20c, ¼ lb. 60c, lb. \$2.00, 5 lbs. \$9.00.

CHILEAN, WHITE SEEDED—This melon in some sections of the State is known as the Cannon-Ball Melon on account of its shape. The rind is thin and the flesh a deep red and deliciously sweet. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

CHILEAN BLACK SEEDED—Earlier than the white-seeded variety and also sweeter, but not so large nor attractive. We can recommend this to the growers as the best early melon. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.



Angeleno

ANGELENO, BLACK SEEDED—This variety is so generally grown throughout the State of California that it is well known on every market. It is of dark green color, almost round, weighs 18 to 20 pounds. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

Muskmelons

One ounce will plant 80 hills; one pound will plant an acre. A light, warm, rich soil is essential for this crop. Plant in hills 6 feet apart each way, using 6 to 8 seeds in the hill. After all danger of destruction by bugs is over, thin out to 3 plants to a hill; when about 1 foot long, pinch off the tips to make them branch. This strengthens the growth of the vines, and makes the fruit mature early.

HONEY-DEW—The delicious honey-like flavor of this new melon met with instantaneous public favor and created a sensation wherever used. The fruit is of good size, weighing 8 to 10 pounds; light colored, smooth skin, thick flesh and solid. Pkt. 5c, oz. 25c, ¼ lb. 75c, lb. \$2.25.

ROCKY FORD, GOLD LINED—This Muskmelon has proved to be most valuable to the

is destined to be popular in all markets. Around Fallon, Nevada, the growers have been making a specialty of this melon and wherever it is sold it commands a higher price than other sorts of the same size. It is a remarkable shipper of very thick flesh which is a golden color. It cuts prettier than any other melon that we know of. We think it the best melon on the market today. Our seed was saved from selected stock and we believe it the finest quality obtainable. Pkt. 5c, oz. 20c, ¼ lb. 60c, lb. \$2.00.

GOLDEN BEAUTY CASSABA—One of the best Cassabas. Begins to ripen in July and bears until frost. Bright yellow, about globular, wrinkled skin, slightly pointed at stem end. Flesh fine-grained, pure white, very thick and of an extra good flavor. Pkt. 5c, oz. 25c, ¼ lb. 60c, lb. \$2.00.

PERSIAN, TURKISH, OR ARMENIAN—Whatever name we know this melon by it is



Tip-Top

grower for local as well as Eastern market. Its size, shape and color exactly suit the epicure; the flesh is very deep, solid and thoroughly melting. The meat is green, slightly golden toward the center. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

TIP-TOP—The melons are of medium size and nearly round, well ribbed and slightly netted over a light green skin. The flesh is quite thick and bright salmon in color. Pkt. 5c, oz. 20c, ¼ lb. 60c, lb. \$1.75.

HEARTS OF GOLD—This is a melon that

in a class by itself. Many dealers endeavor to make a distinction but we cannot recognize any difference ourselves and have so much support in our contention from leading vine seed growers, that we are now making the claim that there are not three distinct types.

HALE'E BEST—This Melon is also known as Early Imperial. Flesh salmon, and extra heavy yielder. Shape oblong, 5 to 7 inches long and produces mostly jumbos which sell at a premium on the early market. Rind is

well netted and very attractive, and an excellent shipper. In our opinion this is positively the best and most profitable Melon for the market grower. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Onions

One ounce of seed will sow 200 feet of drill; 4 pounds will plant 1 acre. A deep, rich soil, thoroughly worked, is best for this crop. Sow thinly in shallow drills and about 12 inches apart; when the plants are about 3 inches high, thin to 3 or 4 inches, according to variety.

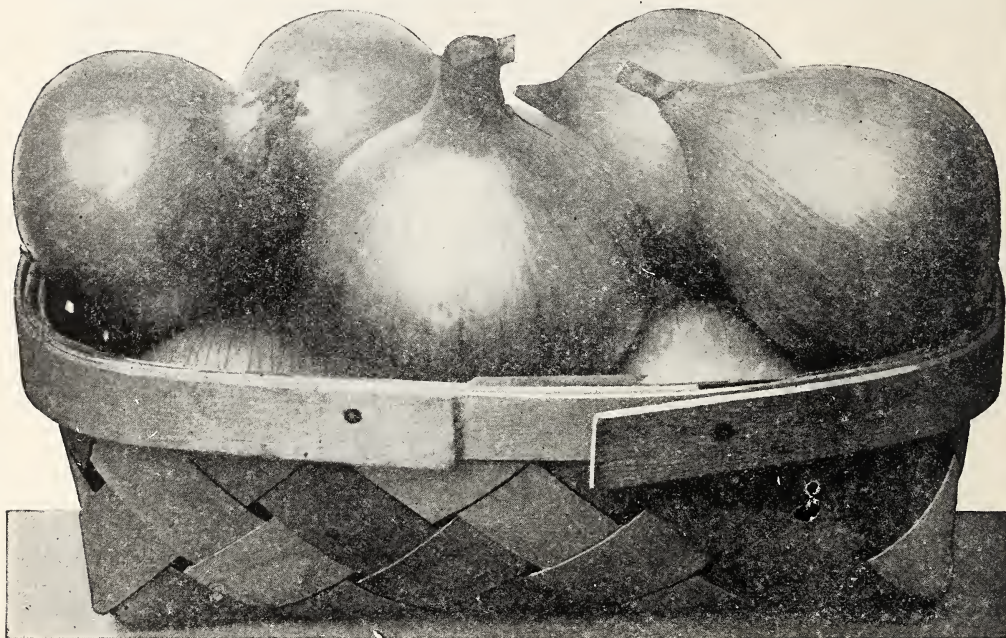
Culture of Onions should be constant, the soil being stirred after each wetting to preserve the moisture and to prevent the forming of a crust. Do not allow the earth to bake over the seeds after sowing. Cultivation with the wheel hoe is of great use in the Onion plot. But hand-weeding among the plants is always a necessity, and may be

AUSTRALIAN BROWN—An extra long keeper and a sure cropper. The skin is a bright, reddish brown; solid white flesh, crisp and of a sweet, mild flavor. We have an absolutely unsurpassed strain of this fine onion. Pkt. 10c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.

YELLOW GLOBE DANVERS—We have an unusually fine strain of this old and well known standard sort. Pkt. 10c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.

WETHERSFIELD LARGE RED—Universally popular both for market and home use; sure and heavy cropper; long keeper; grows to an immense size; of flattened form; skin purplish red; flesh white and slightly fringed with pink. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

WHITE PORTUGAL, OR "SILVER SKIN"—An excellent and popular onion for the family garden; of medium size, flat, symmetrical, very early, good keeper; skin and flesh white, fine grained and unusually mild and delicate; also largely used for pickles



done at thinning time and whenever the weeds grow large. Cultivation should begin as soon as the rows are visible, if the weeds are at all numerous.

Weeds are the Onion's greatest enemies, and should be cleaned out before they choke the seedlings. Onions are often grown year after year on the same land by freely fertilizing. As a rule, however, it is advisable to rotate crops using clovers and other nitrogen makers.

Many growers prefer to raise the small seedlings in beds, and when large enough transplant to the field. The only disadvantage in this method is the extra handling. However, we believe with the small garden it is the better method, because one can and usually will give better care to a small bed than to a long row or rows. Also the weeding process is not so difficult, as the roots are not so apt to be disturbed, where good sized seedlings are planted out in freshly worked soil where the rows are short.

when small. Pkt. 10c, oz. 35c, $\frac{1}{4}$ lb. \$1, lb. \$3.50.

ITALIAN RED—We commenced selling this variety about fifteen years ago, when it was only known in the Sacramento market. However, it is such a delicious sort, and so mild, as well as early, that it is now being sold by seed dealers generally in this State. It is pointed at both ends, and if allowed to remain in the ground until midsummer it reaches an enormous size, and the larger it grows the sweeter it seems to become. The one objection anyone can find to this onion is that it is not a good keeper. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Onion Sets

The best Onion Sets are the Oregon Sets of the Yellow Danvers variety. They grow rapidly and form large, solid bulbs in a comparatively brief season. Lb. 20c, 5 lbs. 85c.

Garden Peas

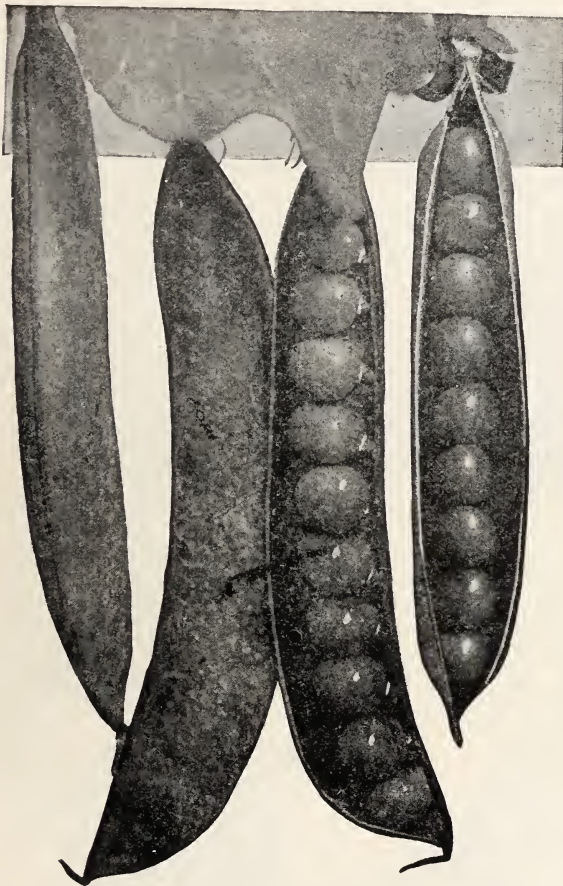
One pound will sow about 100 feet of row. Peas are sown in single or double rows from 2 to 4 feet apart, according to the variety or height to which they grow. The rows of the dwarf varieties should be 2 feet apart, and those of the medium to tall sorts from 3 to 4 feet apart.

Planting of Peas in the Sacramento Valley starts in October, and to have a succession should be planted from two to three weeks until April. We do not advise planting much after April, as the Pea does not delight in

riety; pods and vine dark green; pods 4 inches long and broad pointed. This variety combines earliness, quality and yield.

DWARF TELEPHONE—This sort grows about 2½ feet, vine and foliage dark green and exceptionally stout. Pods dark green, 4½ inches long, strong and pointed, containing 8 to 9 dark green peas of the best quality. For market growers we recommend this sort as being one of the best.

ALDERMAN—This is the best of the Telephone type of pea. Height is about 5 feet, peas dark green, broad pointed and about 5 inches long. This variety is superior to the old types of Telephone or any of the other varieties in this class.



Telephone Peas

dry heat. It is more of a Winter than a Summer plant.

All Varieties—Pkt. 10c. lb. 30c. 10 lbs. and up at 25c per lb. where one variety is ordered.

We are eliminating many of the older varieties of Peas, as the market growers have a preference for the newer types, and it is our aim to keep up with the demands of the commercial planter.

HUNDREDFOLD—A very early dark, broad pointed pod. Quality excellent. Pods 4 inches long, containing eight dark green peas.

LAXTONIAN—A large podded dwarf va-

Peanuts

Select warm, light or sandy soil. Mark out the rows 3 feet apart. Plant in May or June about a foot apart in the rows. Cover with 2 inches of soil. It is not necessary to remove the shucks or hulls before planting, but it is well to break the hulls. Cultivate and hoe freely, keeping soil mellow around the plant. As Peanuts require lime it is well to use some agricultural hydrated or air-slaked lime or gypsum. During late years the Peanut has gained quite a foothold among the other nuts and foods, and the consumption of Peanut butter alone is apparently increasing. It is both delicious and nutritious. The peanut is the seed-vessel or seed of this leguminous plant. The crop matures in about 120 days.

In the Fall before frost dig and hang them up under a shed or in an airy room. About 50 pounds of nuts are required to plant an acre. We can only offer regularly the Japanese Peanuts, which are the principal sort used on this coast. Lb. 25c.

Peppers

One ounce of seed will produce about 1500 plants. A strong, uniform heat is required to germinate this seed, and a thoroughly pulverized, well-enriched, warm soil is necessary to perfect the fruits. When the plants

are about 3 inches high, transplant into rows 3 feet apart and also 2 feet between the plants.

In the case of Pepper Plants it is probably more satisfactory, where only a small number of plants are wanted, to buy the plants from us. We raise plants of most of the varieties listed below, and can furnish them from March until June.

ANAHEIM CHILI—This pepper is largely grown, and is used dried and for canning. It is long, 7 inches or so, medium sized in width, and thick fleshed. The flavor is mild for a Chili pepper, and one favored by Mexicans and Americans alike. Pkt. 10c. oz. 50c. ¼ lb. \$1.65. lb. \$5.

LARGE BELL, OR BULL NOSE—Bright red, mild, large, early; a favorite for pickling

and "mangoes" when green. The flesh is tender and sweet, without a trace of a "bite". Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.

CALIFORNIA WONDER—Large fruit, 4 inches across by 5 inches deep, with very thick walls. Very sweet and mild and an excellent shipper. Pkt. 15c, $\frac{1}{4}$ oz. 50c, oz. \$1.

RED CHILI—Small, bright red; hot and pungent; used for making "pepper sauce" and other condiments. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.

LONG RED CAYENNE—This is a late variety and has small, bright scarlet, cone-shaped, pungent pods. It is much used for pickling green. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.



Chinese Giant

PIMIENTO—Large, heart-shaped; thick flesh; mild apple flavor. Because of its smooth skin, unbroken by ridges, it is in great demand for stuffing and for salads. Pkt. 10c, oz. 50c, $\frac{1}{4}$ lb. \$1.65, lb. \$5.

CHINESE GIANT—This is the largest and most popular of the large peppers. It is between the size of the Bell or Bull Nose, being 4 to 5 inches thick at the top and about 6 inches long. The flesh is very thick and mild. Pkt 10c, oz. \$1, $\frac{1}{4}$ lb. \$3, lb. \$10.

Spinach

One ounce of seed will sow 100 feet of drill; 10 pounds will sow an acre. An exceed-



ingly rich, well-worked soil is necessary. Sow thinly in drills 1 foot apart and $\frac{1}{2}$ inch deep.

When the young plants are established, thin out to the distance of 3 to 4 inches in the row, and in a future thinning every alternate plant may be removed, as Spinach does not do well when crowded.

NEW THICK-LEAVED ROUND LONG-STANDING—Produces large, thick, dark green leaves, somewhat crumpled, and possesses the valuable quality of standing a long time before seeding. Pkt. 5c, oz. 15c, lb. 75c.

PRICKLY OR WINTER—This is an exceedingly hardy variety and in great favor with market gardeners and canners. Profitable producer. Pkt. 5c, oz. 15c, lb. 75c.

Parsley

One ounce of seed will sow 100 feet of drill. Sow thinly in drills 1 foot apart and thin out the plants 3 to 4 inches apart. The seed germinates slowly, sometimes three or four weeks passing before the plants appear.

EMERALD, OR DWARF EXTRA CURLED—Leaves tender, beautifully crimped, handsomely bright green. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.



Double Curled Parsley

FINE DOUBLE CURLED—This is a fine dwarf variety with crimped leaves. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

PLAIN LEAVED—Much used in soup, etc.; rather stronger in flavor than the other sorts; the leaves are long and smooth. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

Pumpkins

One ounce of seed will plant 40 hills; 3 pounds will plant one acre. Plant in hills 8 feet apart each way, allowing three strong plants to a hill. Cultivate in the same way as melons and cucumbers. Keep separate from melons and cucumbers, as they are liable to mix.

CALIFORNIA FIELD, OR LARGE CHEESE—The well-known, ordinary pumpkin, largely used for stock feeding. Fruit is variously colored in yellow, drab, red and



California Field, or Large Cheese Pumpkin orange, and varies also in size, but is usually very large. Is a heavy cropper and easily grown. Pkt. 5c, lb. \$1, 10lbs. \$7.50.

CONNECTICUT FIELD—A variety that is extensively grown east of the Mississippi River, and is well adapted to western coast planting. Its chief value is for stock food, yet it is by no means undesirable for cooking. Pumpkins are exceptionally large, heavy and have a hard shell; color is bright golden yellow. Especially desirable for field culture. Pkt. 5c, ¼ lb. 45c, lb. \$1.25.

SMALL SUGAR, OR NEW ENGLAND PIE—A small round pumpkin of excellent quality. The flesh is rich yellow, thick and sweet, and the skin is deep orange. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

GREEN CUSHAW—Similar to the Winter Crookneck squash. Flesh yellow, fine grained and sweet. Pkt. 5c, ¼ lb. 45c, lb. \$1.25.

MAMMOTH GOLDEN CUSHAW—A yellow crook-necked sort and one of the best stock feeding varieties. It is very solid and nearly all

flesh, having a small seed cavity. Pkt. 5c,

Radishes

One ounce of seed will sow 100 feet of drill; 10 pounds will be required for one acre. Radishes do best in a light, rich soil. Sow in drills about 10 inches apart, covering about ½ inch, and thin plants to 2 inches apart. A rapid growth is essential to produce showy, crisp radishes of a mild flavor. Sow every ten days for a succession of crops.

EARLY SCARLET TURNIP—Small, round, intensely bright scarlet.

ROSY GEM—Selected. Brightest, red, tipped pure white.

CHARTIER, OR SHEPARD—Long, crimson, tipped with white.

EARLY LONG SCARLET—Long, slender, handsomely colored roots. They are ready about 25 days from planting.

WHITE ICICLE—Finest long white Summer radish; tender and crisp.

FRENCH BREAKFAST—A quick growing, olive-shaped radish, about 1½ inches long. Color a bright carmine, with pure white tip. Fine for home garden use.

CALIFORNIA MAMMOTH WHITE WINTER—Long, of immense size.

CHINESE ROSE, OR SCARLET CHINA—Excellent variety and good keeper

ROUND BLACK SPANISH—This is a large, black skinned radish, much relished by the Germans.

LONG BLACK SPANISH—Skin blackish



WHITE TIPPED SCARLET RADISH

brown; firm, white flesh.
All above listed Radishes—Pkt. 5c, oz. 15c,
¼ lb. 35c, lb. \$1.00.



Chartier Radishes

MAMMOTH JAPANESE—This is a Winter variety, often growing 2 feet long and about 3 inches in diameter. The skin is white and flesh solid and tender. It is very pungent. Pkt. 10c, oz. 30c, ¼ lb. \$1, lb. \$2.50

Mustard

The leaves of these varieties of Mustard make excellent "greens" of sharp, pungent flavor, and are cooked the same as spinach or beet leaves. Sow seed in drills early in the Spring and at frequent intervals throughout the Summer to secure a constant supply of fresh "greens". Mustard is hardy and is easily grown. One ounce will sow 50 feet of row.

BLACK OR BROWN—Pkt. 5c, oz. 15c, lb. 60c.

CHINESE—This is a very hardy and broad leaved variety. The leaves are thick and deeply savoyed, and have a broad, white midrib. Pkt. 5c, oz. 20c, ¼ lb 35c, lb. \$1.00.

FORDHOOK FANCY—The dark green leaves of this variety are more curled on the edges than any other sort. Pkt. 5c, oz. 20c, ¼ lb. 35c, lb. \$1.

GIANT SOUTHERN CURLED—Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges. Hardy vigorous. Pkt. 5c, ¼ lb. 25c, lb. 75c.

WHITE ENGLISH—Light green variety; tender leaves. Seed light yellow and pungent. The commercial mustard seed is this sort. Oz. 10c, lb. 75c.

Squash

One ounce of seed will plant 50 hills; 4 to 6 pounds, according to variety, is required for one acre. Plant in well-manured hills, the bush varieties 3 to 4 feet apart, and the running sorts from 6 to 8 feet. Eight or ten seeds to be allowed to a hill, thinning out after danger of bugs is over, and leaving

three of the strongest plants to a hill. Squashes like a rich soil, and it is best to fertilize with well rotted manure before the seed is sown. Keep soil loosened, and prevent the running varieties from rooting at the joints.

EARLY WHITE BUSH SCALLOP—A well known Summer variety, grown extensively for shipping; the flesh is tender and delicate. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

YELLOW BUSH SUMMER CROOKNECK—A bush variety, early and prolific; surface deep yellow, densely warted; quality and flavor good. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

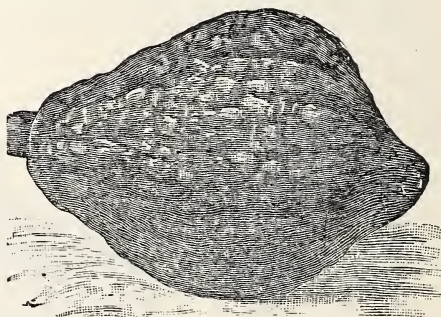


Early White Bush Scallop Squash

BOSTON MARROW—The earliest of the Fall sorts; is ready for use very soon after the Summer varieties; rich orange color, good size; very tender flesh of excellent flavor. Pkt. 5c, oz. 20c, ¼ lb. 45c, lb. \$1.25.

SIBLEY, OR PIKE'S PEAK—One of the best shippers owing to the hardness of the shell. Flesh is solid and thick, of bright orange color and choice quality. Flavor rich and sweet, and it ripens easily. Pkt. 5c, oz. 20c, ¼ lb. 50c, lb. \$1.50.

GOLDEN HUBBARD—For private gardeners this is the best of the Hubbards. The fruits are of the same shape as the green warted type, but average one-half to one-third less in size, and although earlier in the season, keep in excellent shape through the Winter. The skin is bright, deep orange-yellow, and very showy and attractive. The flesh is a deep golden yellow, much richer in color than Hubbard; fine grained; cooks very dry and is of rich flavor. Pkt. 5c, oz. 15c, ¼ lb. 40c, lb. \$1.25.



Hubbard Squash

HUBBARD—Well known and liked for late use; of superior quality; large size, color green, marked with orange; flesh dry, fine-grained and of fine quality. One of the most popular sorts. Pkt. 5c, oz. 15c, ¼ lb. 40c, lb. \$1.25.

MAMMOTH CHILI—The largest of all squashes; grows to an enormous size, but is tender. One of the most profitable sorts for stock feeding. It keeps well throughout the Winter. Pkt. 5c, oz. 15c, ¼ lb. 40c, lb. \$1.50.

VEGETABLE, OR ITALIAN MARROW (Cocozelle Bush, or Zucchini)—An extremely early squash of compact bush growth. The color is dark green at first, but changes to a lighter green as the fruit matures. Usually eaten when quite small, but is still good for the table when nearly full grown. Pkt. 5c oz. 20c, ¼ lb. 60c, lb. \$1.75.

Rhubarb

Seed may be sown in drills 18 to 20 inches apart and covered about an inch deep. Transplant about 5 feet apart each way. One ounce of seed will give you about 500 plants.

MYATT'S VICTORIA—Most popular variety. Pkt. 10c, oz. 20c, lb. \$2.50.

GIANT CRIMSON WINTER—An extremely hardy variety, very prolific and quick growing. Pkt. 10c, oz. \$2, lb. \$25.

Salsify or Oyster Plant

MAMMOTH SANDWICH ISLAND—One of the most delicious of Winter vegetables, and also one of the most nutritious; the flavor is sweet and highly esteemed by many persons, whether served boiled with butter or other suitable sauce, or sliced and fried, or used in soup. Pkt. 10c, oz. 25c, ¼ lb. 85c, lb. \$2.50.

Tomatoes

The best results are obtained from Tomatoes trained on stakes upright and pruned to a single stem, pinching off all side shoots.



San Jose Canner Tomato

After three clusters of fruits have set, pinch off all subsequent blossoms. An ounce will produce 1500 plants; 4 ounces will produce enough for one acre. They do best on light, warm, not over-rich soil; and success depends to a very great extent on securing a rapid, vigorous, unchecked growth the early part of the season. Transplant as soon as plants are fit to handle, into shallow boxes, setting

them 3 to 5 inches apart. When strong and stocky, set out in hills 4 feet apart. By training the vines on trellises or other supports they will be more productive, and the fruit will be of much better quality. By this method the earliest fruits are produced, and the Tomatoes are more regular in size. In field culture trellising is not practical, but large yields are obtained by careful cultivation while the plants are small, and by keeping the fruits picked.

SPARK'S EARLIANA—The earliest and best large, smooth variety; of strong and vigorous growth, setting its fruit freely and in great abundance; of large size, perfect form, bright red in color and of delicious flavor; ripens clear to the stem and does not crack. Pkt. 10c, oz. 40c, ¼ lb. \$1.25, lb. \$3.75.

CHALK'S EARLY JEWEL—A wonderful new variety, in that it is early and bears continuously throughout the season. The fruit is large, smooth, uniform and will ripen clear to the stem, and the flavor and quality are excellent. Pkt. 10c, oz. 40c, ¼ lb. \$1.25, lb. \$3.75.

NEW STONE—Greatest canning tomato in the world. Solidity and carrying qualities are remarkable. Color a desirable red; perfectly smooth and thicker from stem to blossom end than most varieties. Handsome and salable. Pkt. 10c, oz. 35c, ¼ lb. \$1.15, lb. \$3.50.

PONDEROSA—The largest fruited tomato grown, frequently weighing 2 to 4 pounds each; almost as solid as Beefsteak; nearly seedless, with firm, meaty, rich red flesh; unequaled and delicious either sliced, cooked or canned; a healthy, luxuriant yielder. Pkt. 10c, oz. 65c, ¼ lb. \$2.15, lb. \$6.50.

SAN JOSE CANNER—This tomato was first introduced in the vicinity of San Jose. Large size, scarlet color, and a tremendous yielder. As the name implies, it is a canning sort. Pkt. 10c, oz. 50c, ¼ lb. \$1.50, lb. \$5.

YELLOW PLUM—Plum shape, bright yellow; used for pickles. Pkt. 10c, oz. 25c, ¼ lb. 75c, lb. \$2.50.

WINTER CHERRY (Husk Tomato)—Small yellow fruit. Pkt. 10c, oz. 25c.

YELLOW PEAR—This variety is rather small and largely used for preserves. Pkt. 10c, oz. 50c.

Turnips

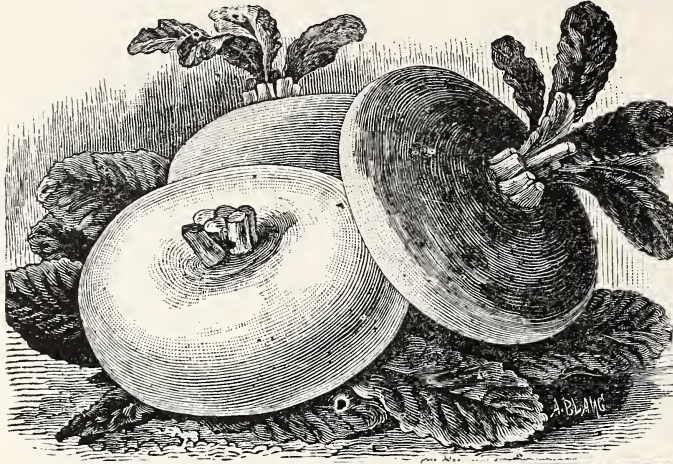
One ounce of seed will sow 250 feet of drill; 3 pounds will sow an acre. This crop does best in highly enriched, light, sandy soil. Sow in drills from 12 to 15 inches and thin early to 8 or 9 inches apart. A good crop when cultivated with judgment. Like many others, it does far better with careful culture in well-fertilized ground.

PURPLE-TOP STRAP LEAF—A rapid

grower, with mild flavor; the most popular sort for early use, either for the table or for stock.

WHITE EGG—Is nearly oval or egg-shaped,

taining wonderfully large size; immense yield; flesh very firm, superior in every way and valuable for all purposes. Pkt. 10c, oz. 20c, $\frac{1}{4}$ lb. 35c, lb. \$1.



Turnips

as the name would indicate; the flesh is very firm and is fine-grained; thin and perfectly smooth skin, and both flesh and skin are snowy white. A very desirable variety.

EARLY FLAT DUTCH—Excellent garden variety, resembling White Strap-Leaf; the best variety for Spring sowing.

YELLOW GLOBE—Flesh a rich pale yellow color, and an excellent keeper.

PURPLE-TOP WHITE GLOBE—As its name indicates it is a globe-shaped Turnip. It is white underground and the exposed part or shoulder purple. The flesh is white, fine grained, tender and keeps well. It is the most popular with the market growers on this coast.

All Turnips—Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

Rutabaga

For feeding stock in Fall and Winter there is nothing superior to turnips or rutabagas, as they are liked by all kinds of stock.

IMPROVED AMERICAN PURPLE-TOP—Leading standard variety, distinct, and at-



Long, Smooth Parsnips

Parsnips

One ounce of seed will sow 200 feet of drill; 5 pounds will plant one acre. This crop requires a very rich soil. Sow in drills 18 inches apart and $\frac{1}{2}$ inch deep, and thin to 8 inches in the row. Parsnips are hardy and can be kept out all Winter.

While Parsnips can be planted the year round in these parts, we suggest that the planting be done in May or June, when the ground is warm. This means that you will have good-sized roots for Winter, when they are most enjoyable. Another point—there is more or less trouble with the amateur gardener to get the Parsnip seed to germinate. We suggest after the seed is planted that the soil be firmed. This helps germination by packing the earth more compactly around the seeds. One way of firming it is to walk directly over where the seed is planted.

LONG SMOOTH OR HOLLOW CROWN-A standard table sort; the best and most productive for field culture. Roots are long, smooth, with deep, hollow crown, tender and sweet. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 45c, lb. \$1.25.

SWEET, POT AND MEDICINAL HERBS

Herbs should be gathered on a dry day, just before they come into full bloom, then dried quickly and packed closely, entirely secluded from the air. Sow in Spring in shallow drills 1 foot apart, and when well up thin out or transplant to a proper distance apart.

ANISE—Hardy annual. Seed used for seasoning, for flavoring liquors and for medicinal purposes. Grows about 2 feet tall. Sow seed where plants are to stand. Pkt. 10c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.

BASIL, SWEET—The leaves and tops are used for seasoning soups, stews and sauces. Pkt. 10c, oz. 20c.

BORAGE—Used in claret and drinks. Excellent bee plant. Pkt. 10c, oz. 20c.

CARAWAY—Biennial; seed used for flavoring breads, cakes and cheese. Grows 2 feet high. Sow the seed in the Spring for seed crop the following year. Pkt. 10c, oz. 15c, lb. 75c.

CELERY—For flavoring. Pkt. 10c, oz. 15c, lb. 75c.

DILL—The leaves are used in soups and sauces, and for flavoring pickles. Pkt. 10c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.

FENNEL—Boiled leaves used in fish sauces. Pkt. 10c, oz. 25c.

HOREHOUND—Used for medicinal purposes. Pkt. 10c, oz. 25c.

LAVERNER—A popular aromatic herb. Pkt. 10c, oz. 50c.

MARJORAM, SWEET—For seasoning. Pkt. 10c, oz. 50c.

SAGE—Leaves and tops used in stuffing. Pkt. 10c, oz. 25c.

SAVORY, SUMMER—Used for seasoning. Pkt. 10c, oz. 50c.

THYME, BROAD-LEAVED—For seasoning, etc. Pkt. 10c, oz. 50c.

WORMWOOD—Used for medicine; also beneficial to poultry. Pkt. 10c, oz. 35c.

VALLEY SEED CO.'S LAWN GRASSES

To have a good lawn the soil must be fine and rich and well leveled. The best seed obtainable should be used. Plant any time from September until late Spring, although very good results have been obtained from lawns made during the Summer. When sown in the Summer, however, the lawn should be covered with straw or some freshly cut grass to protect the young grass from burning. It is a serious mistake not to cut a lawn frequently. When the young grass is from 3 to 4 inches long it should be mowed, but not too short. Repeat the mowing every four or five days until a dense, velvety turf is developed. The lawn should be sprinkled lightly with a fine spray, not washed by strong hosing.

Where soil is light a good application of our specially prepared lawn fertilizers is recommended. This can be applied when sowing seed or any time after.

Rough Stalked Meadow Grass

(POA TRIVIALIS)

This is an ideal perennial shade grass, closely related to Kentucky Blue Grass, but finer and softer. It is a lighter green than Blue Grass and requires more moisture. Lb. 75c, 10 lbs. \$7.

Chewings Fescue

This makes a lasting close turf and is quite successful under poor conditions. It is now used very successfully in lawns and putting green mixtures. Lb. 60, 10 lbs. \$5.

Red or Creeping Fescue

This forms a close sod, valuable in lawns and recommended in shade mixtures. It is also used to bind dry banks and an excellent bottom grass. Lb. 60c, 10 lbs. \$5.

Rhode Island Bent

This grass adapts itself to nearly all soils.

It is very valuable for lawns and now largely used in golf courses. It is a perennial, dwarf and makes a close, beautiful turf. One pound will cover 500 square feet. Lb. \$1.50, 10 lbs. \$12.50.

Creeping Bent

Sometimes called Seaside Bent. Makes a low, velvety turf of very fine texture. This grass is excellent for lawns and especially popular for putting greens. One pound will cover 500 square feet. Lb. \$.25, 5 lbs. \$1.0.

Harding Grass

(PHALARIS STENOPIERA)

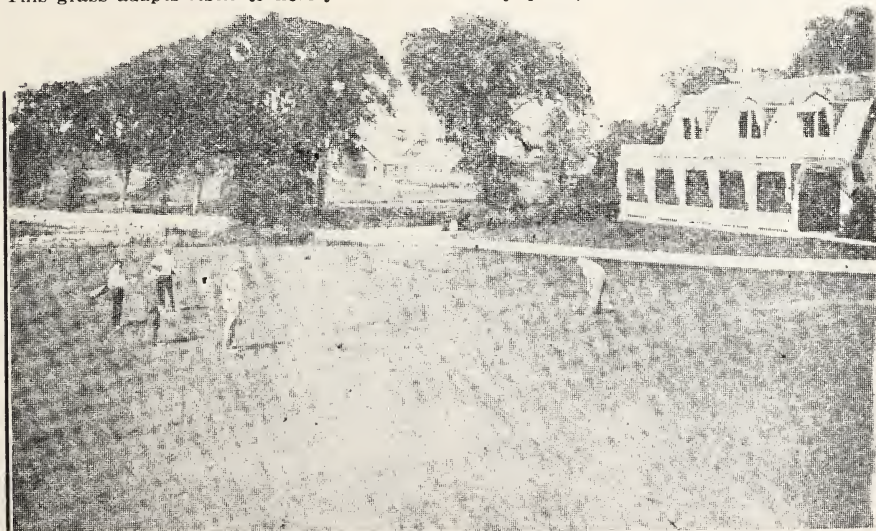
A true and lasting perennial, standing up well under heavy tramping of sheep or cattle. Being a strong grower should make it desirable for controlling Canada thistle, Johnson Grass and fern. Splendid for cattle, pigs and sheep, and also has a heavy butter-fat content. Sown at the rate of 3 pounds per acre, as soon as soil can be worked in the Spring, has proved very satisfactory. Lb. \$.250.

Valley Lawn Mixture

This mixture is especially adapted for grasses, together with genuine Kentucky Blue Grass, and wherever used it has given the utmost satisfaction. It stands drought well and also hard usage, and is highly recommended for recreation grounds, as the thick sod withstands the hard usage to which such grounds are subjected. One pound will sow 200 square feet. Lb. 40c, 10 lbs. \$3.50.

Shady Lawn Mixture

This mixture is especially adapted for shady places and grows quickly. It is most difficult to make a good lawn in a shady place, but this mixture we consider



absolutely the best for the purpose. In this case it is also advisable to apply our fertilizers, as shade is caused in most cases by trees and shrubbery, which take the plant food from the surface of the soil. Lb. 75c, 10 lbs. \$7. One pound will sow 200 square feet.

We will cheerfull compound grass mixtures to order.

BERMUDA GRASS—(See below.)

Australian or Perennial Rye Grass

This grass has become exceedingly popular of late years. It makes a very hardy and beautiful bright green lawn, and if properly cared for, a very satisfactory one. Does particularly well in sandy soils. Valuable as pasture grass. Sow about 1 pound to 150 square feet. Lb. 30c, 10 lbs. \$2.50.

FARM AND GRASS SEED

We endeavor to have at all times stocks of the purest and cleanest Grasses and Clovers that the market affords. Every item that we offer in this respect is tested for purity and germination, and a statement or certificate showing these details is attached to every bag or package. We have recleaning machinery of the most improved type, and nearly all Field Seed that we offer is run through these mills and brought up to the highest possible purity, all weed seed being entirely removed. Therefore, when ordering from us it should not be expected that our prices will compete with country-run stocks or stock offered by merchants who are not seedsmen. Ordinarily, farm seed that is offered cheaply is usually cheap because it is low grade seed, and all farmers know that such cheap or foul seed is expensive to plant.

At the time this Catalog was given to the printer prices appearing below were in effect, but customers, of course, understand that prices of field seeds are subject to change.

Twenty-five pounds sold at 100-lb. rates.

ORCHARD GRASS, OR COCKSFOOT (*Dactylis glomerata*)—This is one of the most valuable and widely known of all pasture grasses, coming early in the Spring and remaining later in the Autumn than any other. It grows 2½ feet high, produces a large quantity of leaves and foliage. Sow 25 pounds to the acre. Lb. 35c, 100 lbs. \$25.

RED-TOP (*Agrostis vulgaris*)—A valuable grass for moist soils. It is a good, permanent grass, standing our climate as well as any others, and consequently well suited to our pastures, in which it should be fed close, for if allowed to grow up to seed the cattle refuse it. On moist, rich soil it will grow 2 feet high, and on poor, gravelly soil about half that height. Sow 25 pounds to the acre. Lb. 50c, 100 lbs. \$35.

MEADOW FESCUE, OR ENGLISH BLUE GRASS (*Festuca pratensis*)—Grows 2 or 3 feet high, but never in large tufts like Orchard Grass. One of the earliest, most nutritious and productive grasses. It is especially suitable for permanent pasture. Thrives well in all soils, but to best advantage on moist lands. Makes good hay, and cattle thrive on it. Sow 35 pounds to the acre. Lb. 50c, 100 lbs. \$35.

ITALIAN RYE GRASS—In nutritive value, arliness and quickness of growth after it has been mown, it far surpasses the Perennial

Kentucky Blue Grass

Makes a splendid lawn of dark green color and remains green all Winter, and is used more than any other one variety of grass seed for lawn. As a pasture grass it furnishes the best of food for stock. Sow 1 pound for 200 square feet of lawn and about 25 pounds per acre for pasture. Our stock is procured from Kentucky, and is positively the best the market offers. Withstands drought better than most cultivated grasses. Lb. 60c, 10 lbs. \$5.50.

White Clover

Dwarf-growing clover now used extensively in making lawns. The color is dark green, and as the leaves are small and close together, it produces an excellent turf that stands constant tramping. Lb. 50c, 10 lbs. \$4.50.

Rye Grass. It is, therefore, indispensable for alternate husbandry; but it does not last over two years. The soils best adapted to Italian Rye seem to be those that are moist, fertile and tenacious, or of a medium consistency, and on such soils it is said to be one of the best grasses known to cut green, affording repeated luxuriant and nutritious crops. Sow 50 pounds to the acre. Lb. 25c, 100 lbs. \$20.

TALL MEADOW OAT GRASS (*Avena elatior*)—Of rapid, luxuriant growth, recommended for soiling and in permanent hay mixtures; also for Winter grazing. This variety is not a lawn grass. Sow 50 pounds to the acre. Lb. 60c, 100 lbs. \$50.

TIMOTHY (*Phleum pratense*)—This is decidedly the best grass for hay. Somewhat coarse and hard, especially if allowed to ripen its seed, yet if cut in the blossom or directly after, it is relished by all kinds of stock, and especially by horses, while it possesses a large percentage of nutritive matter in comparison with other agricultural grasses. It grows rapidly, and yields very large crops on favorable soils. It can never be used effectively as a pasture grass, as the trampling of stock kills the roots. Sow 15 pounds to the acre. Lb. 25c, 100 lbs. \$17.50.

AMERICAN, OR LIBERTY MILLET—Will grow on any good land, and yields heavily when artificially watered. Yields from 40 to 60 bushels of seed to the acre, and is excellent food for stock or poultry. A good green fodder plant. Sow 30 lbs. to the acre. Lb. 15c, 100 lbs. \$9.

PERENNIAL RYE GRASS (English or Australian)—Highly esteemed for permanent pasturage, soiling and the formation of lawns. In habit somewhat like Orchard Grass. It ripens early and should be cut when in blossom, making a large return of nutritious hay, of which stock are very fond. Naturally adapted to a variety of soils, but succeeds best on moderately moist land. Sow 50 pounds to the acre. Lb. 30c, 100 lbs. \$20.

BERMUDA GRASS—As a lawn grass it does well in hot weather; is hardy, makes a solid mat and is hard to get rid of when once it is started. Is good to plant on river banks and levees, as it will hold the soil and furnish a mat of green all through the season. Sow late in Spring. Lb. 60c.

AWNLESS, OR SMOOTH BROME GRASS (*Bromus inermis*)—An erect perennial, 3 to 5 feet high, native of Hungary, where it is considered one of the best hay grasses, yielding a good return in the arid and silicious

soil. We recommend it only for dry, arid soils where the better and more delicate grasses will not grow. It is strongly stoloniferous, its creeping root stocks spreading rapidly underground, giving out new plants; therefore, undesirable for temporary meadows, being difficult to eradicate when once established. Sow 35 to 40 pounds to the acre (12 pounds to the bushel). Lb. 40c, 100 lbs. \$32.50.

KENTUCKY BLUE GRASS—(See page 22.)

Alfalfa

This is the most valuable and largely grown forage plant in this country. Where conditions allow, all farmers in the West should put some land into this crop. It not

to the surface. The beds should be level, and checks thrown up at intervals of 40 to 60 feet for irrigation purposes. Do not sow on wet ground, and the cutting should be done when the Alfalfa is just coming into bloom.

Alfalfa as Pasture: It is not recommended as pasture for sheep or cattle. However, it does make excellent pasture for hogs; and pasture it only after it is two or three years old. Alfalfa is not considered good feed for horses, particularly if fed alone, as it often proves too rich for them.

We do not offer Alfalfa seed from any particular section, because we have learned, from investigation and experience, that no section is favored in producing superior seed, but we do say that the seed we have to offer is second to none in purity. This is a milling art with us, and we remove absolutely, with our up-to-date machinery, all weed seeds from the lots we buy. We are prepared at all times to furnish the Purity and Germination Tests of our stock as made by the Department of Agriculture.

COMMON, OR CHILEAN—

This is the variety used to the greatest extent in the West. It makes the finest hay, and we recommend it over any other sort for planting in the Sacramento and San Joaquin Valleys. Lb. 40c, 10 lbs. \$3.50.

For larger quantities write for prices.

HAIRY PERUVIAN—This sort has an advantage over the common, or Chilean, in that it starts earlier in the Spring and grows later in the Fall and, therefore, during the entire season makes more tonnage. However, we do not recommend it over the Chilean; in fact, do not believe it is as good, because it does not endure as well as Chilean, and



alone has good feeding and fertilizing value, but has, perhaps, paid more to the grower per acre than any other crop, considering the cost of yearly production.

While alfalfa is sown in the valleys probably every month in the year, we suggest Spring and Fall sowing—in the former case after freezing dangers are over and in the Fall sufficiently early to give it a good start before heavy Winter frosts.

The seed is broadcasted at the rate of about 20 to 25 pounds to the acre, and where drilled about 15 pounds to the acre. When sowing with a hand seeder, go over the field crosswise, using half the quantity of seed each way. The seed bed should be well prepared by deep plowing and thorough harrowing, and the ground well pulverized. The land should be well drained, because Alfalfa will not stand continued moisture too close

in time the stems become quite woody. Grows somewhat taller, but does not make as much leaf as the Chilean, and it is the leafy or flexible hay that is desirable. Lb. 40c, 10 lbs. \$3.50.

Clover

WHITE SWEET CLOVER (Mellilotus Alba)—This variety of clover lives two years



and then dies. It makes fine pasture, and can also be cut for hay. Cattle like it and thrive on it. Lb. 30c, 10 lbs, \$2.50, 100 lbs. \$20.

ALSIKE—Succeeds best in the cold, stiff and heavy soils, and in marshy lands where it is too wet for the other species to grow successfully. It is very hardy and withstands severe cold remarkably well. It is a good

honey plant for bees. Fifteen pounds will sow an acre. Lb. 50c, 10 lbs. \$4, 100 lbs. \$35.

RED CLOVER, MEDIUM—Valuable both as a forage plant and for its fertilizing properties. Makes an excellent quality of hay, and can be cut twice a year. Fifteen pounds to the acre. Lb. 50c, 10 lbs. \$4.50.

For larger quantity write for price.

MISCELLANEOUS FARM SEEDS

All seed offered under this heading represents the best the market affords, and while we carry substantial stocks of the principal items during the season when there is demand for them, owing to the frequent fluctuation in the market prices of these stocks, we do not list the quantity prices; therefore, if interested in quantities, we request that you write us for prices, and we will immediately quote.

For green manures we especially recommend Peas, Vetches and Clovers. These plants take nitrogen (the most expensive element of artificial fertilization) directly from the air. The idea of "green manuring" is that it is cheaper and better to plow under half grown or fully grown crops than to spend money and labor on natural or artificial manures.

PEAS, CANADA FIELD—Usually sown with oats and cut when the oats head out, but before the grain is ripe. One hundred pounds of peas and 40 pounds of oats per acre give good results. Lb. 15c, 10 lbs. \$1. Large lots at market price.

SUNFLOWER, MAMMOTH RUSSIAN—Highly valued as an excellent and cheap food for fowls. Three pounds of seed will plant an acre in hills 4 feet apart each way. Lb. 15c. Large lots at market price.

RAPE, DWARF ESSEX—Under favorable conditions it is ready for pasturing sheep or cattle within six weeks from time of sowing, and on an average one acre will carry twelve to fifteen sheep six weeks to two months. It should be sown from September to March, as it thrives best in cool weather. Should be sown 8 pounds to the acre, broadcast. Lb. 15c, 10 lbs. \$1.25.

SORGHUM, OR EARLY AMBER CANE—Can be sown either in drills or broadcast, and fed green or dried. If cut when 2 feet high it will give several cuttings during the season. Sow 10 pounds of seed to the acre in drills and 25 pounds broadcast. Lb. 15c, 10 lbs. \$1. Large lots at market price.

MILO MAIZE—The merit of this non-saccharine sorghum is that when cut for feeding it starts again from the remaining stumps with renewed strength and vigor. Thrives in the hottest and driest localities. It is relished by all stock. Five pounds sow an acre. Lb. 15c, 10 lbs. \$1. Large lots at market price.

EGYPTIAN CORN—A good grain for dry sections and seasons. Very productive, and there is always a demand for it, as the grain is small and can be used as chicken feed. Lb. 15c, 10 lbs. \$1. Large lots at market price.

CANARY—The seed is used for bird food. Is valuable also as an ornamental grass and has considerable merit as hay for feeding cattle. Lb. 20c.

COW KALE, OR JERSEY—Sometimes known as 1000-Headed. Similar to cabbage and should be cultivated and treated in the same manner. Can be planted during the Fall and makes good growth during the winter. Pkt. 10c, ¼ lb. 35c, lb. \$1.

HEMP, KENTUCKY—A staple crop, sown broadcast, using 25 pounds of seed to the acre. For a seed crop, should be sown in hills 4 feet apart. Grows 12 to 14 feet high, with deep cut, dark green, fragrant leaves. Lb. 15c.

SUDAN GRASS—This is no longer a novelty. It has made good and is becoming more popular each year. As to soil it is not particular and stands considerable alkali. This is an annual and earliest planting should not be before March or April. It can then be cut in 60 days and thereafter about every 30 days until about October.

To produce hay of fine quality, we advise sowing 20 pounds of seed to the acre broadcast. If drilled in rows 36 inches apart 4 to 5 pounds are sufficient for an acre.

Sudan endures extreme drought, and delights in excessive moisture. In the late Summer months when all grasses are dry, Sudan is at its best and is more valuable for Fall pasturage for cattle, sheep and hogs. Lb. 20c, 10 lbs. \$1.50.

COVER CROPS

To restore worn out soil or build up poor soil, the most economical method is through use of green crops that are nitrogen gathering. These crops are now so generally and well understood by farmers and orchardists that they need but little explanation from us.

The varieties of seed that have been used for this purpose are almost too numerous to mention. However, we have on hand during the Summer and Fall, when these items are in chief demand, large stocks of the most standard sorts, which are listed below.

MELILOTUS INDICA (also known as Yellow Blossom, Bitter or Sour Clover)—We might say this is indigenous to California, and particularly to the Sacramento Valley. We had considerable to do with the introduction of Melilotus for cover crop purposes, but in the early days of its use we had difficulty cleaning the seed and being able to offer an article of high germination. During recent years we have perfected machinery

that so thoroughly scarifies this seed that the stock we regularly offer will germinate over 90 per cent.

It is customary to plant this seed for cover crop in the late Summer or early Fall. It is easily plowed under and for most places in the Sacramento and San Joaquin Valleys, as well as Southern California where green cover crops are planted, it is our belief that the Melilotus Indica is superior to anything else. Furthermore, it is very much cheaper per acre than any other legume. Some claim that it does not make as much Winter crop as other legumes. On the other hand, it does not Winter kill anywhere in the sections that it is planted for a cover crop. We estimate that among orchards in California during the past few years there was more acreage planted to Melilotus for cover crop than of all the other legumes combined. From 10 to 15 pounds are planted to the acre, broadcast. The seed is about one-half the

size of Alfalfa seed. Lb. 20c, 10 lbs. \$1.50. Ask for quantity price.

VETCH (*vicia sativa*)—This is what is now generally called the Common Vetch. It is also known as Spring Vetch, or Tares. Most of the Vetch that is used in California is planted for cover crop. However, it is also used for hay, in which case it is usually mixed with oats or barley.

Where the Vetch is sown for cover crop about 40 pounds are planted to the acre. Where planted for hay, about 30 pounds of the Vetch is used, with about 60 pounds of grain. Lb. 20c, 10 lbs. \$1.25. Ask for quantity price.

VETCH, PURPLE (*vicia atropurpurea*)—In some tests of Vetch as well as other seed used for cover crop, this variety has given the greatest tonnage. From our observation, we do not value it over the Common Vetch, although the seed has been selling for more money than the common kind.

As to the planting of the seed and the purposes it serves, the same general directions apply to it as appear above in connection with the Common Vetch. Ask for price.

VETCH, HAIRY (*vicia villosa*)—Sometimes called Sand Vetch. This is a type of Vetch little used in California. We do not believe it has any advantage over the Common or Purple Vetch except that it will grow in a

colder climate than the two latter. In fact, where the temperature drops below zero it will live. It is also particularly adapted for sandy soil. Ask for price.

CANADA PEAS—While this is not so much used for cover crop, it is nevertheless, a very important legume for this purpose. At times the price has been somewhat against its use. The seed is larger than Vetch and if it cannot be bought as cheaply as the Vetch, we would not suggest that it be used, because by comparison it makes it too expensive against other cover crops. Canada Peas can also be used in a combination hay crop mixed with oats or grain, using about 50 pounds of Canada Peas to about 50 pounds of the grain per acre. Lb. 15c, 10 lbs. \$1.

BUR CLOVER—This is the native Clover of California. While its principal use may be for pasture, it also makes a splendid cover crop, but a little more difficult to turn under. It does well in nearly all parts of California, but thrives best where the soils are well supplied with lime. It does not produce as heavy a tonnage as the Vetch, Bitter Clover or Canada Peas. In former days we had difficulty in supplying Burr Clover of good germination. Now we have machinery that so thoroughly scarifies this seed that the germination of whatever seed we offer is 90 per cent or better. Lb. 25c, 10 lbs. \$2.

SEED POTATOES

Where cultivation is done with a horse, rows should be 36 inches apart and planting about 12 to 14 inches in the row. Where hand

are wanted we will be pleased to receive your inquiry, and will promptly reply quoting the lowest prices.

AMERICAN WONDER—This early white potato is becoming more popular each year; it is of good size; smooth and a splendid keeper. As a producer it has no equal among early potatoes. We have an excellent strain of Oregon stock.

EARLY ROSE—An extremely early variety, and one of the most popular sorts planted on the Pacific Coast.

GARNET CHILI—This has long been a popular sort in California; in fact, in some of the early coast sections, it is the only kind that is raised. It is a very good yielder and an excellent keeper. It has only one fault, having deep eyes, which causes waste in peeling. For the home garden we believe it one of the best.

BURBANK—An excellent late variety, continues in good demand and is more largely used than any other. Good size, fine form and excellent yielder. Flesh is white and mealy; fine flavor and quality. Well adapted to heavy soils. A variety raised by large commercial growers.



cultivated the rows can be 24 inches apart.

In the valley early planting starts in February. In the coast section planting can be made earlier. The second or Fall crop is planted in July. Early Potatoes require about three months, and late Potatoes about four months to mature.

Ten-pound lots 75c. If larger quantities

Bird Seed

CANARY	lb. 15c, 10 lbs. \$1.25
HEMP	lb. 15c, 10 lbs. \$1.25
RAPE—Imported	lb. 15c, 10 lbs. \$1.25
MILLET	lb. 15c, 10 lbs. \$1.25
MIXED BIRD SEED	lb. 15c, 10 lbs. \$1.25

Bird Food

BIRD BITTERS	vial 25c
BIRD MANNA	pkg. 15c, two for 25c
CUTTLE BONE	two for 5c
SONG RESTORER	vial 15c
ORANGE COLOR FOOD	jar 25c
MOULTING PEPPER	box 25c
MITE EXTERMINATOR	box 25c
MERICAN SALVE	box 25c
NESTLING FOOD	box 25c
NESTLING HAIR	box 5c

FLOWER SEED DEPARTMENT

Flowers are California's natural endowment, and in this State hundreds of varieties of Flower Seeds are grown better than anywhere else. In this respect, therefore, we are in position to give our customers the highest quality. In addition to this, we are thoroughly conversant with most of the popular varieties by reason of being in practical touch with the seed production as well as the growing of plants. We are also in position to furnish most reliable information in connection with these subjects.

If the cultural directions in this Catalog covering flowers are not sufficiently clear, we hope our customers will call on us, and we will cheerfully give them all necessary information.

Annuals, Mixed

A mixture made of good, hardy Annuals that make a brilliant showing in the early Summer. Pkt. 10c.

Asters

Asters have no superiors among the Fall blooming annuals, and many of the new varieties rival the chrysanthemum in size and beauty. The plants are of the easiest cultivation, and require only a moderately rich soil and a reasonable amount of moisture. Sow the seed in boxes about January 1 and transplant about April 1.

GIANT COMET—Of all the tall Comet Asters this is probably the most striking and beautiful. Borne on long stems, the flowers are ideal for cutting. Petals are long, curled and twisted. Rose, Crimson, Light Blue, White and Mixed. Each, pkt. 10c, $\frac{1}{4}$ oz. 50c.

CREGO GIANT—Plants robust, about 2 feet high. Flowers of immense size and borne on long stems. The petals are most attractively curled and twisted, resembling chrysanthemums. Lavender, Pink, Purple, Red, White and Mixed. Each, pkt. 10c, $\frac{1}{4}$ oz. 50c.

CALIFORNIA GIANTS—We believe this the finest type now grown. The flowers measure 5 to 6 inches in diameter, have long stems and stand up well when shipped as cut flowers. Light Blue, pkt. 25c; Dark Purple, pkt. 25c; Deep Rose, pkt. 25c, Mixed, Pkt. 15c.

Adonis

FLOSS (Pheasant's Eye, Rose of Heaven, or Mullein Pink)—An annual of the easiest culture. Foliage is very finely cut and the dark crimson flowers last a long time. Pkt. 10c.

Acroclinium

One of the so-called Everlasting flowers. The plant grows about 15 inches high, producing white or rose-pink flowers which, when cut in the bud, can be dried and used in Winter bouquets. Annual. Mixed colors. Pkt. 10c.

Ageratum

(FLOSS FLOWER)

During the Summer these hardy annuals

are produced in the greatest profusion. The plants come very quickly from seed, and are rapid growers. The Dwarf sorts should be planted about 10 inches apart, and will soon make a mass of low growing plants that show a most charming combination of colors. They are fine for planting in front of larger growing plants, and make an exceedingly neat border to the flower bed.

IMPERIAL DWARF BLUE—Habit dwarf and compact; well adapted for ribbon border; grows about 9 inches tall. Pkt. 10c.

IMPERIAL DWARF WHITE—Same as Dwarf Blue, except in color. Pkt. 10c.

Agrostemma

(ROSE OF HEAVEN)

CORONARIA—A hardy perennial that blooms the first season. The flowers are



California Giant Aster

produced on long stems and are fine for cutting; plants grow about 2 feet tall. Mixed colors. Pkt. 10c.

Alyssum

One of the most satisfactory plants for borders, baskets, rockwood or cutting. In borders the seed should be sown thickly so as to form masses, and should be sown quite early in Spring, or even the previous Autumn. For Winter blooming the seed may be sown in August and the seedlings thinned to about a dozen for a good sized basket. If the plant is cut back after the first flow-

ers fade, a succession of bloom can be had.

MARITIMUM (Sweet Alyssum)—The pure white, fragrant flowers are produced all Summer in remarkable profusion. Annual. Pkt. 10c.

MARITIMUM, LITTLE GEM—Annual. Best adapted for baskets or for edgings; flowers are produced very freely. Pkt. 10c.

SAXATILE COMPACTUM (Gold Dust)—Perennial. Flowers are produced on stems about 6 inches long, and make a most attractive show when used in carpet bedding. The foliage has a slightly grayish tinge. Pkt. 10c.

Amaranthus

For massing as a background for other flowers, or for the center of a bed these annual plants are very handsome. The seed may be sown in the open border or in a hot-bed, and the seedling can be planted about the first week in April. Even upon poor soil the foliage is unusually abundant and rich and striking, with green, yellow, and brilliant red, forming striking contrasts with green foliaged plants. They should be set about 20 inches apart. Hardy annual.

CAUDATUS (Love Lies Bleeding)—Long drooping scarlet flowers; plant grows about 3 feet tall. Pkt. 10c.

TRICOLOR SPLENDENS (Joseph's Coat)—Foliage variegated; scarlet, crimson and bronze-green. Plant grows from 2 to 3 feet tall. Pkt. 10c.

Antirrhinum Snap-Dragon

The Snap-Dragons are almost continuous bloomers that succeed best in a light soil and in a sunny position. Although perennials, they are usually treated as annuals.

TALL MAXIMUM—This is the newest creation in Giant Antirrhinums and is a marked advance over the older Tall Large Flowered type in size and brilliance of color. The flowers are well placed on the stems. Pkt. 10c, ¼ oz. 65c.

Separate Colors Bronze, Crimson, Yellow, White, Rose. Each 15c Pkt.

FINEST MIXED—Tall. Contains named varieties of many colors. Pkt. 10c.

Asparagus Fern

The ornamental varieties of Asparagus are valued for their finely cut foliage, and both the climbing and trailing sorts are very attractive. Tender perennials.

SPRENGERI (Emerald Feather)—A graceful plant valuable for hanging baskets. The sprays are light green and grow from 3 to 4 feet long. Seed should be soaked in warm water. Pkt. 10c, oz. 75c.

PLUMOSUS—For greenhouses or potted plant use, with long, fine, feathery foliage. The sprays, when cut, retain their freshness in water from three to four weeks. Seeds start slowly, and should be soaked in water before sowing. Pkt. 10c.

Australian Pea Vine

(DOLLCHOS LIGNOSUS)

An evergreen perennial showing large clusters of rose-colored flowers. For covering arbors, trellises, etc., it has no superior. Frequently makes a growth of 20 feet or more. Pkt. 10c.

Bean

SCARLET RUNNER—Annual. The flowers are bright scarlet, while the beans are black, splashed with lake. Pkt. 10c, lb. 35c.

Balsam

The large flowered double Balsams are of most perfect form and beauty, the plants being covered with large, double flowers of brilliant colors—self-colored, blotched, spotted and striped. The plants are annuals and grow from 18 inches to 2 feet in height. Tender annual.

CAMELLIA FLOWERED—Flowers very large and double, and of great variety of colors. This variety is extremely useful for border planting and lining the edge of a path or drive. Blooms freely during the entire Summer. Mixed. Pkt. 10c.

Balsam Apple

(MOMORDICA BALSAMINA)

Annual vine, usually classed among the gourds. The plant makes a fine shade, and is one of the most popular climbers used in this section, growing 25 feet high under ordinary conditions. Pkt. 10c, oz. 25c, ¼ lb. 75c.

Balloon Vine

Love-in-a-Puff is the common name of this rapid growing annual climber that succeeds in light soil and warm location. The flowers are white, and the seed pods look like miniature balloons. Pkt. 10c.

Calliopsis or Coreopsis

Calliopsis is an annual producing a profusion of rather small, yellow flowers with a brown center. We advise sowing this seed where the plants are to bloom. Pkt. 10c.

Coreopsis is a perennial, blooming longer, perhaps, during the whole season than any other flower. It makes an excellent cut flower, lasting well. Flowers bright yellow, large and showy. While usually grown from seed it is rather slow. Pkt. 10c. (For Plants see page 48.)

Candytuft

Indispensable for cutting. The plants are best when set in masses. The seeds may be sown in Autumn to produce flowers early in Spring, but when sown in April plants will bloom from July to September. Annual.

EMPRESS—Distinct candelabra-shaped branches, bearing immense pyramids of pure white bloom. Pkt. 10c.

Crimson; very beautiful. Pkt. 10c.

Carmine; carmine-rose. Pkt. 10c.

Lavender; delicate shade of rosy lavender. Pkt. 10c.

All colors, mixed. Pkt. 10c.

Canary-Bird Flower

The popular name of this climbing annual suggests the resemblance of the flower to a bird with outspread wings, the spurs of the calyx resembling the head and the two upper petals the wings. The yellow flowers are produced from June to October. Pkt. 10c, oz. 25c.

Canna

(INDIAN SHOT)

DWARF, LARGE FLOWERING FRENCH—Soak the seeds in warm water until they

begin to swell, then sow in sandy soil and place in a hotbed; when the second leaf shows, pot the plants and keep under glass until time for planting. Tender perennial. Mixed colors. Pkt. 10c.

Campanula Medium

(CANTERBURY BELL)

One of the prettiest of the old-time garden flowers. Their delicate coloring and bell shape make them very attractive. Biennial.

CALYCANTHEMA (Cup and Saucer) — Usually considered the handsomest of all



Campanula

the Campanulas. The flowers are of many shades, and in shape resemble a cup and saucer. Double, mixed, pkt. 10c; Single, mixed, pkt. 10c.

Carnations, Marguerite

This variety blooms about five months after sowing the seed. The flowers are double and exquisitely sweet. These plants succeed alike in open ground or in pots. Perennial. Pkt. 10c.

Celosia, Cockscomb

Ornamental annuals, producing long spikes of feathered flowers. The plants succeed well in the garden, and are also very attractive as pot plants.

EMPRESS—Splendid, compact heads of a bright crimson color. Pkt. 10c.

GLASGOW PRIZE—An improved strain with immense heads borne on sturdy plants. They are excellent for borders. The color is rich crimson. Pkt. 10c.

PYRAMIDALIS PLUMOSA—Plants are of pyramidal form, with long, feathery plumes of bright colors. Mixed colors. Pkt. 10c.

THOMPSONII MAGNIFICA—This popular feathered Celosia contains many shades of color, varying from pale yellow to the deepest crimson. Pkt. 10c.

CHILSI (Chinese Woolflower) — Plants about two and one-half feet high, branch freely and produce large, globular, purplish crimson flowers which resemble a ball of brilliantly colored wool. Pkt. 10c.

Centaurea

This hardy annual is generally known as the Bachelor's Button, although the *Centaurea Cyanus* is the true Bachelor's Button. The plants are perfectly hardy, and will grow anywhere, and are particularly valuable for loose bouquets.

CANDIDISSIMA (Dusty Miller)—A low-growing plant with silvery white foliage, especially useful for potting, and for bordering a bed of flowering annuals like Pansies, Sweet Williams and similar low-growing plants. Pkt. 10c.

CYANUS—The deep blue Bachelor's Button. Pkt. 10c.

IMPERIALIS—A large flowered type, exquisitely fringed and sweet scented. The flowers are twice the size of the older varieties, and will retain their freshness for a long time after cutting; 3 feet.

Imperialis, Pure White, Yellow, Blue or Mixed. Pkt., each, 10c.

MOSCHATA, OR SWEET SULTAN—A well-known type in White, Yellow and Purple blossoms. Mixed, pkt. 10c.

Chrysanthemum

(For Plants see page 48.)

Clarkia

Hardy annuals that are easily grown. They flower freely, are showy in the border, good for cutting and form nice pot plants.

ELEGANS—Double and Single. Mixed; 2 feet. Pkt. 10c.

Cobaea

SCANDENS—A rapid growing, half hardy perennial climber, with large, bell-shaped, purple flowers and beautiful foliage. Needs rich soil. Plant the seed edgewise and cover lightly. Pkt. 10c.

Coix

LACRYMA (Job's Tears)—An ornamental grass with broad leaves and shiny, pearl-like seeds used for beads. Plant the seeds early in the Spring, putting four or five seeds in a hill, and about one-half inch deep. Will grow 3 feet high. Annual. Pkt. 10c.

Clematis

Well-known perennial climbers, remarkable for the size and beauty of their blossoms.

This hardy annual is generally known as *Pine* for covering arbors, verandas, etc. All colors mixed. Pkt. 10c.

Clianthus

DAMPIERI (Glory Pea of Australia)—Tender perennial. Pea-shaped flowers of a brilliant scarlet color, with intense black center. Requires a dry, warm soil and little water. Pkt. 15c.

Coleus

(FLAME NETTLE)

This is a tender, sensitive perennial, and is grown for its beautiful, many colored, velvety leaves of pleasing appearance. It is very popular for window garden or pots, and may also be grown out of doors. The height is from 10 to 18 inches. Rainbow mixture. Pkt. 25c.

Cosmos

The plants grow 5 to 6 feet high, and are one mass of feathery green foliage, gemmed with large single flowers of white, pink, or crimson, enlivening the garden long after more tender flowers have succumbed to early frosts. For bouquets and vases this is one of the



Coleus

finest flowers grown. This half hardy annual may be sown from February till June. Sow in boxes to transplant, or they may be safely grown out of doors if frost is over.

GIANT LATE, OR LADY LENOX

The finest late flowering type, bearing giant flowers with broad and overlapping petals of splendid substance. The plants, 5 to 6 feet high, are of symmetrical pyramidal form.

PINK—Bright pink. Pkt. 10c. ¼ oz. 20c.

WHITE—Pure white. Pkt. 10c. ¼ oz. 20c.

CRIMSON—A brilliant crimson. Pkt. 10c. ¼ oz. 20c.

MIXED—Contains an even proportion of the above colors. Pkt. 10c. oz. 50c.

MAMMOTH EARLY FLOWERING COSMOS

A great improvement on the ordinary flowering type. Plants grow 3½ to 4 feet tall and produce immense flowers in 60 days from time of sowing.

PINK—Pkt. 10c. ¼ oz. 25c.

WHITE—Pkt. 10c. ¼ oz. 25c.

CRIMSON—Pkt. 10c. ¼ oz. 25c.

MIXED—Pkt. 10c. ¼ oz. 20c. oz. 60c.

KLONDIKE—Dwarf late blooming with orange-yellow blossoms. Pkt. 10c. ¼ oz. 60c.

DOUBLE CRESTED COSMOS

The plants grow 3½ to 4 feet tall and produce a small percentage of flowers having double centers and a row of petals around the base of the flower, which makes them very effective.

PINK BEAUTY—Soft pink. Pkt. 15c.

WHITE QUEEN—Pure white. Pkt. 15c.

CRIMSON KING—Dark crimson. Pkt. 15c.

MIXTURE OF ABOVE COLORS—Pkt. 15c.



Columbine or Aquilegia

Sometimes erroneously called Honeysuckle by a great many people, though the two are very similar in appearance, and therefore it is rather difficult to distinguish between them, except to one who is familiar with both. Handsome flowers.

BEST DOUBLE OR SINGLE VARIETIES
—Mixed. Pkt. 10c.

Daisy, Shasta

A fine perennial plant bearing large, white, single blossoms, with yellow centers. An excellent cut flower. Soak seed in warm water over night before sowing. Pkt. 15c.

Daisy or Bellis Perennis

A well-known, low growing plant bearing a profusion of beautiful flowers. Hardy perennial.

LONGFELLOW—Double. Pink. Pkt. 10c.

DOUBLE—White or Mixed. Pkt. 10c.

Delphinium

Hardy border perennials, with spikes of handsome flowers. Useful for cutting.

ELATUM HYBRIDUM, DOUBLE MIXED—The large, handsome flower spikes, including the best of the new Double and Single varieties. Height 3 feet. Pkt. 10c.

BELLADONNA—New, beautiful turquoise blue and continuous bloomer. Spikes of good size. Pkt. 25c, 1/8 oz. 75c.

BELLAMOSA—Dark blue, of the Belladonna type. Good bloomer. Pkt. 25c.

Dolichos

(HYACINTH BEAN)

A tender climbing annual. Flowers profusely and in clusters of white, purple and lilac shades. The flower spikes are followed by a profusion of ornamental seed pods. Height 10 to 20 feet. Mixed colors. Pkt. 10c.

Dahlias

In the garden the Dahlias grown from our seed bloom as early and freely as the plants grown from tubers. They are so easily grown from seed that we think in a year or two the popular demand will be for seed instead of tubers. If the seed is sown early, indoors, and the plants set in the open as soon as safe, blooms may be had before frost, and the tubers carried over as usual. Dahlias should have good, rich soil. Pinching out the points of growths tends to dwarf the plants, and also incites to earlier flowering.

CACTUS—From a fine collection. Pkt. 10c.

SINGLE MIXED—A fine strain of large flowers in many colors. Pkt. 10c.

DOUBLE MIXED—Pkt. 10c.

Dianthus or Pinks

Few flowers equal these hardy annuals in beauty and profusion of bloom. They are beautifully marked with rich and varied colors. The plants bloom until frost.

HEDDEWIGGI, DOUBLE MIXED—Flow-

ers large and of the most brilliant colors, varying from pure white to the richest crimson, while many are beautifully laced or striped. For bedding purposes they are of immense value during the entire Summer. They also furnish elegant flowers for bouquets, as they are borne on long stems. Pkt. 10c.

CRIMSON BELL—One of the most attractive varieties of the Dianthus. Flowers large, elegantly lacinated; lovely rich crimson shade. Pkt. 10c.

EASTERN QUEEN—One of the most attractive varieties of Dianthus. Flowers large, elegantly lacinated, and of a lovely rose pink shade. Pkt. 10c.

SINGLE MIXED—Fringed flowers of various colors. Pkt. 10c.

CHINENSIS, DOUBLE (China, or India Pink)—Choice mixed. Large, double flowers, embracing a variety of beautiful colors. Pkt. 10c.



Columbine, or Aquilegia

PLUMARIUS (Florists' Perpetual)—A hardy class, producing large, fragrant, double, semi-double and single flowers of varied colors. Pkt. 10c.

Digitalis

(FOXGLOVE)

Hardy perennial, blooming the second year from seed. The bell-shaped flowers are borne on long spikes, and come in shades of purple, lavender, rose and white, all spotted lightly inside. Thrives well in cool, shady locations, and makes a splendid show in the garden. Fine mixture. Pkt. 10c, oz. 50c.

Eschscholtzia

(CALIFORNIA POPPY)

A hardy annual, with fine cut, feathery

foliage and beautiful, velvety, cup-shaped flowers. Seeds may be sown in Fall and any time thereafter until the following April, where plants are to remain, as they do not transplant easily. Height 2 feet.



Gillardi

CALIFORNICA—Large, pale yellow flowers. Pkt. 10c.

CALIFORNICA ALBA—Large flowers of pure white. Pkt. 10c.

MANDARIN—Bright orange, shaded crimson. Pkt. 10c.

MIXED COLORS—Pkt. 10c.

Forget-Me-Not

(MYOSOTIS)

Bushy plants 8 to 10 inches high, bearing clusters of small flowers. If sown in the house they will flower the first season.

ALPESTRIS—Of compact habit and a profuse bloomer, having the appearance of a brilliant sheet of blue. Pkt. 10c.

ALPESTRIS, VICTORIA—Flowers large and bright azure blue with yellow centers. Plants bush-like and covered with blooms. Pkt. 10c.

Four o'Clock

A hardy annual, about 2 feet high. Of the easiest culture. Seed should be sown in the open and thinned to 1 foot. Is free flowering. The Flowers open in the afternoon and last until the next morning. Mixture of all colors. Pkt. 10c.

Gaillardia

Half hardy perennial; 1 to 2 feet high. For the flower garden, grown in masses, they are especially effective. Large flowers 2 to 3 inches across, produced from early Summer until frost. They are unrivaled for cutting.

THE DAZZLER—Large dark rich red flower with bright orange tips. Pkt. 10c.

PICTA LORENZIANA—Double. Finest mixed. Annual. Pkt. 10c.

GRANDIFLORA MAXIMA—A perennial. Golden yellow. Pkt. 10c.

Geum

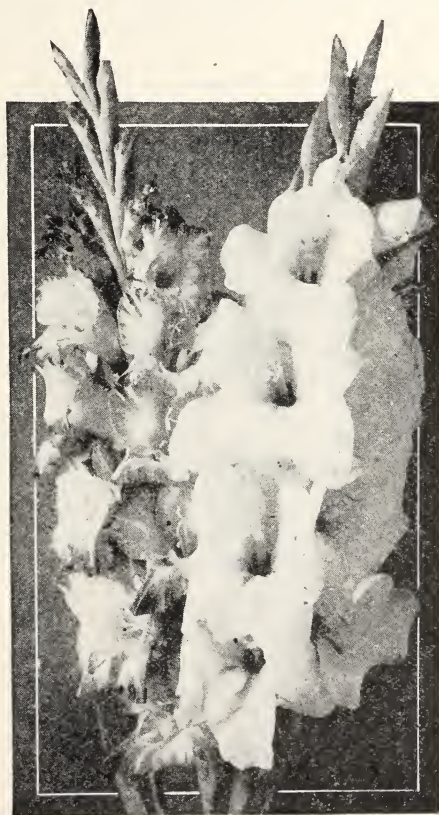
MRS. BRADSHAW—A showy, hardy pe-

rennial with double brilliant scarlet flowers, borne on long stems. Useful for cutting as well as for growing in borders. Pkt. 15c, ¼ oz. 75c.

LADY STRATHEDEN—A novelty. Fine, rich yellow flowers which match in other respects the popular scarlet variety. Mrs. Bradshaw. Pkt. 25c.

Gladiolus

Gladiolus in California makes the best possible use of a sunny location. The late type listed below is the large variety. The bulbs should be planted from December until April. Any good garden soil will make strong plants and good blooms, but a light application of any well decayed manure or good commercial fertilizer applied on the top of the ground after the plants are several inches high will aid in producing large blooms. Keep the ground moist until the full spikes appear, then water freely. The bulbs should be taken up in the Fall after the leaves have become yellow and then stored in a cool, dry place, free from frost. The bulbs should be planted about 6 inches deep in good soil and about 10 inches apart.



Gladiolus

GLADIOLUS

BYRON L. SMITH—Lavender, Pink White Ground	1.00	6.50
CRIMSON GLOW—Brilliant Crim- son	1.00	6.50
E. J. SHAYLOR—Clear deep Rose pink .....	.75	5.00
GOLDEN MEASURE—Deep Yellow	1.00	6.50
HALLEY—Lovely Salmon pink.....	.75	5.00
LILY WHITE—Snow White.....	.75	5.00
LOS ANGELES—Shrimp pink with orange carmine throat.....	.75	5.00
MARY PICKFORD—Creamy white throat sulphur Yellow.....	.75	5.00
MRS. FRANK PENDLETON— Pink with blood-red blotch in throat .....	.75	5.00
PRINCE OF WALES—Light Sal- mon .....	.75	5.00
PURPLE GLORY—Large Ruffled Velvety Maroon	1.00	6.50
ROSE ASH—Old Rose blended with pink	1.00	6.50
VIRGINIA—Glowing Scarlet .....	.75	5.00
RAINBOW MIXTURE—.....	.40	2.50

ers, 6 to 8 inches, of a deep cream color with velvety maroon center. Plants grow from 3 to 5 feet and are perennial and bear profusely. Pkt. 10c.

Hunnemannia

FUMARIAEFOLIA (Tulip Poppy)—This is by far the best of the Poppy family for cutting, remaining in good condition for several days. Seed sown in May will, by the middle of July, produce plants covered with their

Godetia

The Godetias are profuse and constant bloomers, with their delicate tints of crimson, rose and white. Very attractive. Hardy annuals.

SEMI-DWARF—Fine mixed. Pkt. 10c.

Gourds

The Gourds are rapid growing annuals, bearing curious fruits of various sorts.

DIPPER, BOTTLE, EGG-SHAPED—Pkt. 10c.

ORNAMENTAL, MIXED—Pkt. 10c.

Gypsophila

Free flowering, elegant plants. The annuals are adapted for rustic rockwood and edging. The perennials are perfectly hardy, succeeding in any garden soil.

PANICULATA (Baby's Breath)—Perennial. A mass of the finest leaves and branches, covered with tiny white, star-shaped flowers. Pkt. 10c, oz. 40c.

ELEGANS—Annual. Small, white flowers. Pkt. 10c, oz. 25c.

Heliotrope

A universal favorite on account of its delightful fragrance. Excellent for cutting. Seed sown in early Spring will make fine plants during Summer. Partial shade suits it best. Annual. Mixed colors. Pkt. 10c.

Helichrysum

(Straw Flower)

Everlasting flowers suitable for mixed borders. The flowers retain their shape and color for years, but it is necessary to gather them before they are fully expanded, and hang upside down to dry. Useful for winter bouquets, decorations, etc. Annual. Choice mixed colors. Pkt. 10c.

Hibiscus

GIANT GOLDEN BOWL—Very large flow-



Hollyhock

large buttercup yellow, poppy-like blossoms, and never out of blossom until hard frost. The plants grow about 2 feet high, with beautiful feathery, glaucous foliage. Annual. Pkt. 10.

Humulus

(Japanese Hop)

A hardy climbing annual of rapid growth with dense leaves. Will grow from 15 to 25 feet in a season. Pkt. 10c.

Hollyhock

A Summer flowering plant, bearing long spikes of double flowers that are 3 to 4 inches across. A clump or line in any garden gives a most pleasing and beautiful effect, and one not obtainable with any other plant.

ALLEGHENY—This unique and beautiful variety produces semi-double flowers about 3 inches across. The petals are crinkled and fringed like crumpled and slashed satin. Pkt. 10c.

CHATER'S SUPERB MIXED—Perennial. Saved from a magnificent collection of fine double varieties. Pkt. 10c.

DOUBLE ANNUAL MIXED—Pkt. 10c.

Ipomoea

Tender climbing annuals, from 5 to 10 feet long. The seed of several varieties, especially the Moonflower, should have the outer



Morning Glory

shell punctured and then soaked in water for twelve hours or more.

BONA NOX (Evening Glory, or Good

Night)—Large, fragrant, violet blossoms, expanding in the night. Pkt. 10c, oz. 25c.

COCCINEA, OR STAR IPOMOEIA—Small scarlet blossoms. Vines about 10 feet. Pkt. 10c.

GRANDIFLORA ALBA (Moonflower)—Large, white blossoms, 5 to 6 inches across, which expand at night. The vine grows as much as 50 feet in a season, and is covered with a multitude of beautiful flowers. Pkt. 10c.

MORNING GLORY (Giant Japanese)—Mixed colors. Pkt. 10c, oz. 15c.

Kochia

(Summer Cypress)

A pretty, half hardy annual, forming compact bushes about 2½ feet in height, with small, feathery, light green, drooping foliage, which changes as the Summer advances to a deep green, and to a crimson hue in September. Sow the seed in the Spring and transplant to 3 feet apart when the root is well started. Pkt. 10c.

Lantana

Tender perennial, growing from 2 to 3 feet high, bearing verbena-like clusters of flowers in orange, white, rose and other colors. Good for bedding. Choice mixed. Pkt. 10c

Larkspur—Annual

There are two classes of Larkspur, which are quite distinct—Annual Larkspur and Perennial Larkspur—which are called Delphiniums. Hardy annual varieties grow 2½ feet high. They produce a profusion of blooms in a great variety of colors. Tall double stock flowered.

DARK BLUE—Pkt. 10c, ¼ oz. 30c.

EXQUISITE PINK—Pkt. 10c, ¼ oz. 50c.

LUSTROUS CARMINE (or Newport Pink)—Pkt. 10c, ¼ oz. 30c.

LILAC—Pkt. 10c, ¼ oz. 30c.

WHITE—Pkt. 10c, ¼ oz. 30c.

Lathyrus

LATIFOLIUS (Everlasting Pea)—Perennial climbers, growing 5 to 6 feet tall. Suitable for trellises, arbors, etc. Young plants flower freely the second year, but the third and fourth years they produce an abundance of foliage and bloom. Fine mixture. Pkt. 10c.

Linum or Flowering Flax

Beautiful and effective, hardy annuals, growing about 18 inches high. Have bright colors.

SCARLET—Pkt. 10c. **BLUE**—Pkt. 10c.

Lobelia

These are low growing annual plants, largely used as borders for flower beds, in ribbon designs, for covering rockwood and in hanging baskets. The plants are charming in both foliage and flower, and certainly are worthy of a much larger place in our garden plants than they now receive.

GRACILIS—Blue flowers, trailing vine. Beautiful for hanging baskets. Pkt 10c, ¼ oz. 25c.

CRYSTAL PALACE COMPACTA—Plant dwarf. Flowers very fine; rich, deep blue; finest for bedding and edging. Pkt. 10c, ¼ oz. 50c.

Lupin or Lupinus

Very desirable shrubby plants, bearing long spikes of variously colored flowers.

ANNUAL MIXED—Pkt. 10c, oz. 20c.

PERENNIAL MIXED—Pkt. 10c, oz. 25c.

Marigold

The African and French Marigolds are old favorite free flowering annuals of easy culture. Both are extremely effective. The former have uniformly large, yellow or orange colored flowers, and are well adapted for large beds or mixed borders. The latter are of dwarf growth, with beautifully striped flowers, and better suited for bedding purposes or for pot culture. They succeed best in a light soil with full exposure to the sun.

DWARF FRENCH—Fine colors, mixed; very double; 1 foot. Pkt. 10c, oz. 40c.



Nasturtiums

LEGION D'HONNEUR—"Little Brownie"—A single flowering marigold, forming compact bushes 6 inches high. Begins flowering in June. Flowers golden yellow, marked with a large spot of crimson velvet. Pkt. 10c.

LARGE AFRICAN—Double, orange and lemon mixed; 2 to 3 feet. Pkt. 10c.

CALENDULA, OR POT MARIGOLD—Sometimes called the "Old-Fashioned Marigold". Mixed. Pkt. 10c.

Matricaria

CAPENSIS (Double Feverfew)—A free-flowering perennial border plant bearing a

mass of cream-colored flowers; 2 feet high. Pkt. 10c.

GOLDEN BALL—Six to 10 inches high; irregular in outline, with a flat shaped head of numerous quilled flowers, sulphur-yellow. For pots, beds, edging. Perennial. Pkt. 10c.

Mignonette

(Reseda)

Sowings made in April and again in July will keep up a succession from early Summer till frost; can also be grown in pots for Winter and early Spring flowering. Annuals.

DEFIANCE—When grown under favorable conditions, spikes will be not only of remarkable size—from 12 to 15 inches long—but deliciously fragrant. The individual florets are of immense size, forming a graceful, beautiful and compact spike. Pkt. 10c.

GOLDEN MACHET—Distinct variety of Machet, with massive spikes of golden yellow blossoms. Pkt. 10c.

MACHET—Of dwarf, pyramidal growth, bearing numerous flower stalks, highly colored and very fragrant; one of the best. Pkt. 10c.

GOLIATH—Of strong, compact habit, with rich green foliage, the giant trusses of flowers being borne on erect, strong, stiff stalks and surpassing all others in brilliancy of color; especially suited for house culture. Pkt. 10c.

SWEET-SCENTED (Reseda odorata)—The spikes are small, but very sweet-scented. Pkt. 10c.

Mimulus

TIGRINUS GRANDIFLORUS (Monkey Flower)—Tigered and spotted, very showy. Very satisfactory for moist, shady situations outdoors, and are splendid house plants; require plenty of water; $\frac{3}{4}$ foot. Pkt. 10c.

Mina

LOBATA—A fine annual climber which grows to a height of 20 to 30 feet in a season. Mina is one of our best climbers, the leaves are of good size and dense, and the flowers are freely borne in clusters; orange-red. Useful for arbor, trellis, etc. Pkt. 10c.

Nasturtiums

Nasturtiums are hardy annuals, of easy cultivation, and flower best where the soil is not too rich.

TALL, OR CLIMBING VARIETIES—Pkt. 10c; $\frac{1}{4}$ lb. 35c.

DWARF VARIETIES—Pkt 10c, $\frac{1}{4}$ lb. 35c.

NEW FRENCH NASTURTIIUM "CHAMELEON"—A remarkable advance in this brilliant family. In richness and variety of colors it surpasses any other strain, and is also unique in bearing flowers of quite distinct coloring on one and the same plant—some clear, deep crimson, others blotched on light ground, and others beautifully mottled. We furnish both the Tall and Dwarf separately. Pkt. 10c, oz. 20c.

NEW IVY-LEAVED NASTURTIIUMS—Distinct and showy, differing from all other Nasturtiums in both foliage and flower. The leaves are deep, rich green, veined with

silvery white, resembling the hardy English Ivy. Tall and Dwarf separately. Pkt. 10c, ¼ lb. 35c.

Nemophila

(Love Grove)

An old favorite. Hardy annuals of dwarf



Pansy

growth. Fine for borders, pot culture or rockeries. Mixed varieties. Pkt. 10c.

INSIGNIS (Baby Blue Eyes)—Sky blue with white eyes. Blooms when quite small and continues for a long time. Pkt. 10c, oz. 20c.

Nicotiana

AFFINIS (Tuberose Flowered Tobacco)—Hardy annuals. Sweet scented, pure white, tubular flowers, blooming continually; 2 to 3 feet. Pkt. 10c.

HYBRIDS—Eight distinct colors mixed. We offer them in mixture only. Pkt. 10c.

Nigella

(Love in a Mist, or Devil in the Bush)

Compact growing, free flowering, hardy annual plants with curious flowers and finely cut foliage. Mixed. Pkt. 10c.

Passion Flower

(Passiflora)

A half hardy perennial climber, shedding leaves in Winter. Very satisfactory climber of immense growth; will cover a porch or small cottage in one Summer.

PINK—Evergreen foliage. Pkt. 10c.

PURPLE—Pkt. 10c.

SCARLET—Evergreen foliage. Pkt. 10c.

WHITE—Pkt. 10c.

MIXED—Pkt. 10c.

Pansies

Little praise is needed for this most popular of all flowers, as it is seen everywhere

and under all conditions. It is, however, well to mention that, no matter how careful and attentive the grower may be, it is but wasted time if you have not the proper seed to begin with. All our Pansy seed is obtained from the most noted European specialists, and we claim that seed obtained from us will produce flowers of unsurpassed size and form, beauty of markings and brilliancy and variety of colors and shades. Perennials.

The Pansy blooms freely even during the hottest weather if the plants are set in a shaded place, but the flowers reach their greatest perfection in late Spring and in the cool days of Autumn. Our list is not extensive, but it contains some of the best named varieties.

PRIZE MIXTURES

BUGNOT MIXED—A circular, ruffled and five-petaled type, with soft, blended colors and tints, with a dark blotch at the base of each petal. One of the finest qualities. Pkt. 25c.

CASSIER'S GIANT—A grand mixture of the finest blotch varieties, splendid in every way, being large in size and rich in coloring. Pkt. 10c.

GIANT ODIER—A very showy and rich strain, saved from very large and beautiful flowers. Pkt. 25c.

PRIZE STRAIN—This mixture comprises a great number of new shades and varieties. All are of splendid form and the size immense. We believe it the finest mixture to be had. Pkt. of about 500 seeds 50c.

GIANT TRIMARDEAU PANSIES

Beautiful class of vigorous and compact growth. The blooms are of the largest size, while the brilliancy coloring is extremely striking. Our named varieties are carefully chosen for color. In our mixture you will find named sorts and many self-colored flowers.

All Trimardeau varieties, Pkt. 10c, ¼ oz. 60c, oz. \$2.25.

Pentstemon

One of our best flowers for the hardy perennial border; grows 2 feet high; flowers the first season from seed, and blossoms freely. Pentstemon sends up spikes of bright colored and spotted flowers somewhat like the Foxglove. Fine mixed. Pkt. 10c.

Phlox Drummondii

For beds and massing nothing can surpass these beautiful annuals. They produce immense trusses of large, brilliant flowers of numberless hues throughout the Summer. This strain has beautiful round petaled flowers, larger than in the older sorts; showy and constant.

FIREBALL—Brilliant, dazzling scarlet. Pkt. 10c.

SNOWBALL—Pure white. Pkt. 10c.

CUSPIDATA (Star of Quedlinburg)—Star-shaped flowers, many colors. Pkt. 10c.

FINE MIXED—Large flowering sorts only. Pkt. 10c.

Portulaca or Rose Moss

Brilliant dwarf annuals, only 6 inches high, luxuriating in warm locations and blooming profusely from early Summer to Autumn. For low beds and masses of color from Spring until frost they are indispensable.

Colors range through innumerable shades of red, yellow, pink, striped, white, etc.

SINGLE MIXED—Pkt. 10c, $\frac{1}{4}$ oz. 25c.

DOUBLE MIXED—Pkt. 10c, 1-16 oz. 25c.



Ruffled Petunias

Petunia Hybrida

During the whole season this beautiful flower is entirely covered with large, showy and attractive blossoms which are always bright and fresh, in spite of heat and drought. The flowers are of an almost infinite variety of colors and markings, and varied in form. Large and small fringed, plain, double and single. Hardy annual. Make the seed bed of fine soil. Sow seed on the surface and press with a smooth board, covering lightly with sand or fine soil. When watering the bed it is best to use a fine spray, otherwise the seed may be washed out or covered so deeply that it cannot germinate.

SINGLE, FINE MIXED—Pkt. 10c, $\frac{1}{8}$ oz. 25c.

RUFFLED GIANTS OF CALIFORNIA—Most of the flowers are exquisitely fringed on the edges and are very large; the colors are rich and gorgeous and of delicate shades; some have charming deep throats of yellow, white, black, green or maroon; the flowers are of great substance and very deep throated. Pkt. 25c.

Poppies

Poppies are very showy and come in many bright and charming colors. Some are hardy annuals, others are perennial. The annuals should be sown

where they are to remain as soon as the ground can be prepared. The perennial can be sown in the Fall in boxes and transplanted.

CALIFORNIA POPPY—(See Eschscholtzia, page 30.)

SHIRLEY—Annual. The range of color extending from white through delicate shades of pink, rose and carmine to deepest crimson. Fine for cutting. Best Single Mixed. Pkt. 10c, $\frac{1}{2}$ oz. 25c.

DOUBLE CARNATION FLOW-ERED—Annual; fringed; colors are dazzling. Mixed. Pkt. 10c, oz. 25c.

ICELAND, OR NUDICAULE—Bright green, fern-like foliage, formed in tufts from which issue slender stalks about 12 inches in height, bearing yellow, white or orange-scarlet flowers. Hardy perennial. Mixed colors. Pkt. 10c, oz. 25c.

UMBROSUM—Annual. Rich vermillion; glossy black spot on each petal. Single. Pkt. 10c, oz. 30c.

DOUBLE SCARLET, OR WHITE—Annual. Pkt. 10c, oz. 25c.

ORIENTALE (Oriental Poppy)—A hardy perennial. Large, brilliant crimson flowers with a black blotch on each petal; $2\frac{1}{2}$ feet tall. Pkt. 10c.

Pyrethrum

(Parthenifolium aureum, or Golden Feather)

Small cut leaves of bright golden yellow. A hardy perennial with bright



Oriental Poppy

foliage. Much used for edging and borders. Seed can be sown in the Fall or Spring and transplanted. Pkt. 10c, oz. 50c.

Ricinus

(Castor Oil Plant)

Large, luxuriant, hardy and rapid growing plants, with palm-like leaves. Much used for sub-tropical effects on the lawn or for the centers of beds of foliage plants. Annual.

Rhodanthe

"Swan River Everlasting" is a charming annual. Succeeds in a light, rich soil and a warm, sheltered situation. It is valuable for pot culture, growing about 1 foot in height. Pkt. 10c.



Salpiglossis

Salpiglossis

These annuals, considered by many to be among the most satisfactory, start easily from seed. Showy, rich, dark colored, bell-shaped flowers produced until cut down by frost.

FINE MIXED—Pkt. 10c.

Smilax

Charming, tender perennial climber for greenhouse or window gardens. The foliage

and stems are of a pleasing light green. Excellent for decoration. Pkt. 10c.

Salvia

(Flowering Sage)

Half hardy perennials, blossoms the first year from seed, which should be sown as early as possible either indoors or in a hot-bed, and the young plants transferred to their flowering quarters when the weather has become settled and warm.

SPLENDENS—Scarlet. One of the finest of the Sages, growing in a compact bush about 2 feet high by 2 feet in diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark green foliage and completely cover the plant. One of the most gorgeous plants in cultivation, and a great bedding plant. Pkt. 10c.

PATENS (Blue Sage) — In color this is as blue as the "Scarlet Sage" is red. Unlike the latter, however, it is not useful for bedding, but is a beautiful plant for the border or greenhouse. Tender perennial; 2 feet. Pkt. 15c.

Scabiosa

(Sweet Scabious or Morning Bride)

Free flowering annuals. Colors white, carmine, lilac, maroon, etc. Very effective for garden decoration. Valuable for cutting.

DWARF OR TALL, DOUBLE MIXED—All colors. Pkt. 10c, oz. 15c.

Schizanthus

(Poor Man's Orchid)

An easily grown plant, bearing quantities of beautiful orchid-like flowers in a bewildering range of color. The plants are such profuse bloomers that each plant looks like an immense panicle of lovely blossoms. May be sown in April in the open ground where they are to remain. A sowing made in Autumn, putting three to five plants in a 6-inch pot, will give an abundance of bloom through the Winter. Many colors, mixed. Annual. Pkt. 10c.

WISETONENSIS — This variety is now largely used as a pot plant for the house or conservatory. It is remarkably free flowering, and presents a beautiful appearance with its myriads of blooms, the ground color of white dotted with delicate rose, with a large spot on the upper lip varying in shade between golden yellow, carmine, rose and light brown. In many ways it is as handsome as an orchid, and is much more easily grown. Shy seeder. Pkt. 15c.

Stocks

Annuals. These popular flowers are easily grown, and are so highly fragrant and of such beauty that they deserve a place in every garden. The flowers range from white to deep red. They are great improvements over the Gilliflowers of the olden times, these being much larger and more double grown, and also of many more colors.

LARGE FLOWERING, TEN WEEKS,

MIXED—This is an excellent sort for bedding out for Summer blooming. Pkt. 10c.

MAMMOTH NICE—A splendid type used for Summer flowering, but more valuable for Winter flowering. Mixed. Pkt. 10c.

Statice

(Sea Lavender)

Splendid hardy annuals, either for the border or rockery, producing all Summer panicles of minute flowers, which can be dried and used for Winter bouquets.

Mixed. Pkt. 10c.

Sweet Peas

(Choice Selection)

Since the introduction of the Spencer types, the growing of Sweet Peas has increased tenfold. Because the Spencer varieties are larger and have longer stems, they have almost entirely superseded the Grandiflora or Eckford type. The seed should be planted from September to March.

EARLY FLOWERING SPENCER SWEET PEAS

This variety will commence flowering from four to six weeks earlier than the regular Spencer type and remain in bloom for a long season. They have the large ruffled blooms of the Spencer type.

ALBATROSS — All White.

AMETHYST—Royal Purple.

ASTA OHN—Lavender Suffused Mauve.

AVIATOR—Dazzling Crimson Scarlet.

EDWARD ZVOLANEK — Large Lavender.

GLITTERS—Cerule.

BLUE PICOTEE — White edged with Violet blue.

HELEN LEWIS — Orange Salmon.

LIBERTY — Crimson.

VULCAN — Vivid Scarlet.

ZVOLANEK'S ROSE — Giant Rose Pink.

ZVOLANEK, CHAS. — Lavender.

Any of the above, Pkt. 15c, oz. 60c.

SPENCER OR ORCHID FLOWERED SWEET PEAS

This is the finest type of Sweet Pea; large and wavy blooms on long stems, generally four blooms to the stem.

ASTA OHN—Lavender Suffused Mauve.

AUSTIN FREDERICK—Giant Lavender.

BARBARA—Fine Salmon.

CONSTANCE HINTON—Mammoth White.

COUNTLESS SPENCER—Rose Pink.

CRIMSON KING—Rich deep Crimson.

DOBBIES CREAM—Deep Primrose.

ELFRIDA PEARSON—Large Shell Pink.

ETTA DYKE—Pure White waved.

FLORA NORTON—Bright Blue.

HAWLMARK PINK.

HAWLMARK CERISE.

HEAVENLY BLUE—Delphinium Blue.



ILLUMINATOR—Salmon Orange, overlaid Cerise Pink.

KING EDWARD—Crimson self.

MAMMOTH—Blazing Orange Scarlet.

MARGARET ATLEE—Giant Buff Pink.

MARY PICKFORD—Dainty Cream Pink Suffused Salmon.

MATCHLESS—Cream.

MISS CALIFORNIA—Orange Salmon, Cream Pink.

MRS. RUTZAHN—Apricot Suffused Pink.

RENOWN—Carmine Rose.

ROYAL PURPLE—As named.

VALENTINE—Blush Pink.

WEDGEWOOD—Azure Blue.

WHITE SPENCER—As named.

YOUTH—Large White Pink Picotee.

CAMPFIRE—Bright Scarlet.

DORA—Cerise Cream wings.

DOREEN—Carmine.

FORTUNE—Dark Blue.

GLENEAGLES—Large Lavender.

PINKIE—Rose Pink.

POWERSCOURT—Lavender.

ROYAL PINK—As named.

SUPREME—Pale Pink.

WARRIOR—Maroon.

WHAT JOY—Cream.

Any of the above, Pkt. 10c, oz. 30c.

Superb Mixture, containing all the worth while novelties of recent years. Pkt. 10c, oz. 20c, 3 ozs. 50c, lb. \$2.25.

Sunflower, Helianthus

Stately annuals with immense golden flowers. Effective for garden decoration.

DOUBLE DWARF—Covered with 3-inch double flowers of brightest golden yellow. Pkt. 10c, oz. 25c.

GLOBOSUS FISTULOSUS—Saffron; very large double. Pkt. 10c, oz. 25c.

MULTIFLORA—Beautiful double yellow flowers. Pkt. 10c, oz. 25c.

MAMMOTH RUSSIAN—(See "Sunflower, Mammoth Russian", page 24.)



Zinnia, Dahlia Flowered (See Page 40)

Sweet Rocket

"Hesperis" is an old, hardy garden favorite. Fragrant white flowers; 2 to 3 feet. Perennial. Pkt. 10c, ¼ oz. 15c.



Sweet William

(*Dianthus barbatus*)

A well-known, remarkably free flowering plant of brilliant colors, ranging from snow-white to darkest crimson and purple. They emit a delicate fragrance. Sweet Williams are splendid plants for borders. If cared for during Summer and slightly protected in Winter, they will last for years, furnishing a profusion of flowers for garden coloring and for cutting. Hardy perennial.

SINGLE MIXED—Pkt. 10c, ½ oz. 25c.

DOUBLE MIXED—Pkt. 10c, ½ oz. 50c.

Tritoma

UVARIA—Sometimes called Red-Hot Poker. This is a fine, handsome plant. It is hardy though requiring some protection through the Winter. The flowers are produced in large, brilliant spikes. Half hardy perennial. Dazzling orange red. Pkt. 10c.

Thunbergia

Rapid growing annual climbers. Splendid for trailing over trellises, fences, etc. Beautiful flowers borne in profusion. Buff, white, orange, etc.; 4 to 6 feet high. Mixed colors. Pkt. 10c.

Vinca

(Madagascar Periwinkle, or Old Maid)

Ornamental, free blooming plants. Flowers from seed the first season.

lasting until frost. Or they may be potted and kept in bloom through the Winter. A fine cut flower. Tender perennial; 2 feet. Mixed colors. Pkt. 10c.

Verbena

Plants grown from our seed are cheaper than those grown from cuttings, and are more vigorous, with rich, dark green foliage, and continue in bloom until cut off by heavy frosts. A most satisfactory plant for the garden, and when grown in a porch or window box the long stems droop gracefully over the sides. The flowers are delicately sweet scented. Half hardy perennial.

MAMMOTH MIXED—Saved from the choicest flowered varieties, and contains the newest and most striking colors. Pkt. 10c.

MAMMOTH WHITE—Pkt. 10c.

MAMMOTH SCARLET—Pkt. 10c.

MAMMOTH PURPLE—Pkt. 10c.

MAMMOTH PINK—Pkt. 10c.

Viscaria

(Rose of Heaven)

The profusion of bloom will rank them among the general favorites. Perennial. Fine. mixed. Pkt. 10c.

Wallflower

(Cheiranthus Cheiri)

Produces spikes of beautiful, exceedingly fragrant flowers. Should be planted more extensively all over the country. Blooms in May. Half hardy perennial.

FINEST DOUBLE MIXED—Branching. Pkt. 10c, 1/8 oz. 75c.

SINGLE MIXED—Pkt. 10c.

Zinnia

Of easiest cultivation and should be in every collection. Hardy annuals. Sow in a seed bed, and when the plants are well started transplant the strongest where they are to be grown. Zinnias bloom from June until Fall. The flowers of some varieties often reach 8 inches in diameter.

DAHLIA FLOWERED—This is a new type of Zinnia, producing flowers in full bloom that often measure 4 inches in depth and 6 to 8 inches in diameter, resembling Show Dahlias. The plants of this new type are very sturdy and produce an abundance of flowers with stout stems in a wide range of colors. Pkt. 15c, 1/4 oz. 60c.

ZINNIA, DAHLIA FLOWERED—Separate colors, Old Rose, Orange Yellow, Crimson, Lavender and Purple. Pkt. 20c.

GIANT DOUBLE, MIXED—All colors. Pkt. 10c.

INSECTICIDES

These cannot go by mail, except where noted, but must go by express or freight, collect. We do not absorb these charges. Prices quoted are f.o.b. Sacramento.

SQUIRREL POISON—A certain and speedy poison to squirrels, gophers, crows, rats and mice. Put up in cans of three sizes: 45c, \$1.10 and \$2.00.

TObACCO DUST—If dug around the roots, will keep away all pests below ground and insure health to the plants. Lb. 10c; if wanted by parcel post, add postage at your zone rate.

FISH-OIL SOAP—Dissolved in water makes an excellent spray for scale on palms, etc. One-pound pkg. 35c. If wanted by parcel post, add postage at your zone rate.

TREE SEAL—A perfect grafting and pruning compound. Pt. 35c, qt. 60c, gal. \$1.80.

BLACK LEAF 40 (Nicotine Sulphate—40% Nicotine)—This is the insecticide that is so highly recommended by experiment stations. It destroys Aphis (plant lice), Thrips, Leaf-hoppers on all tree, bush and vine fruits, vegetables, field crops, flowers and shrubs; also Apple Red Bug, Pear Psylla and similar soft-bodied, sucking insects—all without injury to foliage. May be combined with other sprays. Highly concentrated. Soluble in water; easy to mix; does not clog nozzles. You cannot go wrong by ordering "Black Leaf 40" for sucking insects.

1 oz. (makes 6 gals. spray).....\$0.35
1/2 lb. (makes 40 to 120 gals. spray)..... 1.25

2 lbs. (160 to 500 gals. spray).....\$ 3.25
10 lbs. (800 to 2500 gals. spray)..... 11.85

Acme Arsenate of Lead

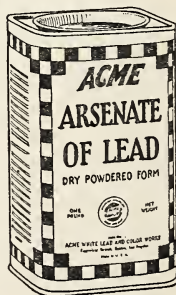
It kills the bugs, sticks to the leaves and does not burn or injure the foliage.

While these qualities make it the favorite spray for fruit trees, it also gives splendid results on vegetables and tobacco.

Arsenate of Lead is recommended to control leaf eating insects on apples, cherries, currants, gooseberries, grapes, peaches, pears, plums, strawberries, pecans, asparagus, beans, cabbage, cauliflower, potatoes, tomatoes and tobacco.

When dusting fruit add five parts hydrated lime. Vegetables eight parts of lime.

1/2-lb. carton.....\$0.25
1-lb. carton40
4-lb. bag 1.25



Acme Garden Guard

No Sprayers. No Water. No Mixing. Dust on plants from sifter top carton or through burlap sack.

Acme Garden Guard is the strongest garden insecticide of its type on the market—yet safe to use. Ideal for the housewife to use.

For use on Cabbage, Cauliflower, Tomato Plants, Melon vines, Currant and Gooseberry Bushes and other vegetables, flowers and shrubs of many kinds.

The Bordeaux Mixture in Garden Guard acts, in a measure, as a fungicide.

1-lb. sifter carton.....\$0.25
5-lb. paper bag......90



Acme 2-Way Spray

An approved balanced Insecticide and Fungicide containing 14 per cent arsenate of lead and 83 per cent Bordeaux Mixture—two results with one spray. Controls insects, combats blight, stimulates foliage.

Easy to apply, wet or dry. For dusting apply lightly, as it comes in the package.

In spraying apples, grapes, muskmelons, potatoes, squash and tomatoes, use 9½ level tablespoonfuls to 1 gallon of water.

On pears, sour cherries, egg plant and peppers use 7 level tablespoonfuls to one gallon of water.



½-lb. carton\$0.25
1-lb. carton45
4-lb. paper bag1.25

Acme Lime-Sulfur

Acme Lime-Sulfur is a standard 33° Baume lime and sulphur solution, converted into dry powdered form, having all the effectiveness without the bother in handling.

For dormant spraying in the Fall or early Spring against Scale, Peach Blight, Leaf Curl and Twig Borer, use 9 to 11 tablespoonfuls to one gallon of water.

For Summer spraying against Scab, Soot and Blotch use from 2½ to 3 level tablespoonfuls to one gallon of water.

Two and a half to 3 tablespoonfuls to 1 gallon of water will control Red Spider and Mites.

1-lb. can.\$0.35 5-lb. can.\$1.25 10-lb. can.\$2.10



Acme Bordeaux Mixture

Prevents large losses caused by blight, rot, mildew, scab, anthracnose, and certain other fungous diseases. Will stimulate plant growth and greatly increase the harvest. On apples, grapes, currants, gooseberries, strawberries, pecans, potatoes and tomatoes use eight level tablespoonfuls to one gallon of water.

For spraying sour cherries, pears, plums, celery, beans, oranges, grape fruit and lemons, use six level tablespoonfuls to one gallon of water.

1-lb. carton\$0.35
4-lb. paper bag......85



AUTO-SPRAY NO. 5

Price \$5.00

This Pump is the ideal all-purpose hand sprayer. Its field is practically unlimited, as it may be used for spraying trees, vines, garden truck, potatoes and any field crop. It also may be used for handling whitewash, disinfectants, etc.

The nozzles regularly furnished with this Pump are of special design so this sprayer can be used on trees the height of an apple tree as well as on bushes near at hand.

We furnish an extra solid stream cap for washing windows and carriages. This solid stream or long distance nozzle can be used to fight fires also. We know of no other small hand sprayer that will throw as fine a spray as the Auto-Spray No. 5.

This Pump can be used with any receptacle the user may possess for spraying trees or whitewashing where the outfit does not necessarily have to be portable. Where there is any field work to be done and the sprayer has to be moved constantly about, we advise purchasing with this pump a knapsack tank.

The Pump is made entirely of brass. It has two ball valves so arranged that they may be instantly cleaned. The threads are all cut, not rolled, so that there is on chance of leakage. Pump is double acting, and will generate a pressure of 200 pounds.

We furnish with this Pump 2½ feet of ½-

inch suction hose with heavy strainer on an extension that will not work out of a bucket or tank when the Pump is being used.

The strainer can be easily taken out of the



strainer casting. This strainer has five square inches of screen surface.

The extension is extra and is very useful for spraying field crops. The extension is so curved that the operator can direct the spray up or down while using the pump in a horizontal position.

The knapsack tank is also extra as described above.



Use **EVERGREEN** NON-POISONOUS INSECTICIDE

to
PROTECT YOUR GARDEN

A NON-POISONOUS SPRAY THAT CAN BE MAILED

Evergreen is recommended for use against both sucking and chewing insects, such as plant lice, cabbage worms, cut worms, thrip, cucumber beetle, rose chafer, red spider, mealy bugs, etc. It is harmless to humans, animals and birds and kills only insects. It may be used freely on tender plans and flowers—it cannot burn or otherwise injure them.

Being liquid it is easy to mix and it does not clog sprayers.

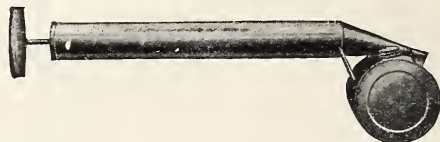
A small amount of non-caustic soap should be incorporated as a spreader or adhesive agent.

1½ ozs. makes	9 gallons spray	\$ 0.35
6 ozs. makes	38 gallons spray	1.00
16 ozs. makes	100 gallons spray	2.00
32 ozs. makes	200 gallons spray	3.50
1 gallon makes	800 gallons spray	13.00

SPECIAL TIN SPRAYER

Pump tube is 14 inches in length and 1¾ inches in diameter. The reservoir holds approximately one quart of liquid, and is covered with a zinc filler cap, which will not corrode. Spray tube is protected with a band brace.

Sprayer is adapted for all lines of general spraying. Each.....60c



A FINE PLANT FOOD	<h1>STIM-U-PLANT</h1> <p>PLANT STIMULANT TABLET</p>	IT'S IN TABLET FORM
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AN ALL-THE-YEAR FERTILIZER For Garden and House Plants

Growers of fine flowers, shrubs and vegetables for the best markets and for exhibition, fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-planT, an odorless, highly concentrated plant food, in tablet

form, with guaranteed chemical analysis of 11 per cent nitrogen, 12 per cent phosphoric acid, 15 per cent potash. The proportions are accurate, there is no unnecessary filler, and in this from you are able to apply plant food exactly when and where and as needed.

MAKE YOUR GARDEN A WONDER GARDEN

These tablets increase production, heighten color and improve quality. Many professional and amateur growers use them extensively all the year around—from early Spring until late Fall outdoors, during the Winter for pot plants, hothouse benches, etc. They are equally good for evergreens and other trees as well as for ferns, petunias and other potted plants.

STIM-U-PLANT TABLETS

can be used in tablet form, or dissolved in water at the rate of one tablet to the quart. Complete directions with every package.

Order Stim-U-planT Tablets with your seed and plant order.

Price—10 tablets for 15c; 30 for 25c; 100 for 75c

Transportation Is Paid at Prices Quoted, Except on Insecticides and Fertilizers

OTHER FERTILIZERS

	Per 100 Lbs.		Per 100 Lbs.
Nitrate of Soda.....	\$ 5.00	Lime Sulphur, Phosphate and Ammoni- um Sulphate	\$ 2.50
Blood and Bone.....	4.00	"Fertobac"	5.50
Bone Meal.....	3.00	Angora Manure, 75 lbs.....	2.00
Blood Meal.....	6.00	Angora Manure, five 75 lb. bags.....	9.50
Lime Sulphur	1.50		
Lime Sulphur and Phosphate.....	2.00	All above f. o. b. Sacramento	

BE SURE TO NAME
THE CROP IT IS
WANTED FOR. IN-
SURE BETTER
QUALITY AND
LARGER CROPS



A GOLD MEDAL
WAS AWARDED
"NITRAGIN" AT
THE ST. LOUIS
WORLD'S FAIR IN
1904, 26 YEARS
AGO

ORIGINAL SOIL INOCULATOR

A GREAT PRICE REDUCTION TO FARMERS GROWING ALFALFA, CLOVERS AND OTHER LEGUMES

Sold on Bushel Basis—Not Acre Sizes
This Means Nitragin Costs Less

1/4 bushel size, for 15 lbs. seed.....	\$0.40
1/2 bushel size, for 30 lbs. seed.....	.60
1 bushel size, for 60 lbs. seed.....	1.00
5 bushel size, for 300 lbs. seed.....	4.75
Garden size for Peas, Sweet Peas and Beans .....	.20

Inoculates From 1 Oz. Package Up to 3 Lbs.
Seed

Insures a Better Quality, Larger Crops and
Faster Growth

Alfalfa, Clovers, Soy Beans, Vetches, Peas,
Beans, Cowpeas, Peanuts and Other Legumes
Should Always be Inoculated With Nitragin.
The Lack of Necessary Bacteria in the Soil
Is Often the Cause of a Poor Legume Crop
—a Weak Start, or a Total Failure.



BENEFITS OF INOCULATION

First—Inoculated legumes take nitrogen
from the air to supply the plant, resulting in
faster growth, earlier maturity, larger crops.

Second—Inoculated legumes take up more
nitrogen than the plant itself requires, the
surplus remaining to the benefit of future
crops.

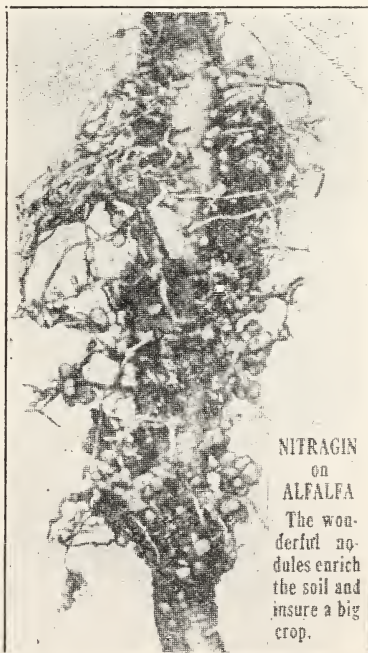
Third—Inoculated legumes develop larger
root systems than when not inoculated, and
therefore reach the immense stores of pot-
ash and phosphorus in the subsoil, bringing
them up to supply plant. When the roots and
stubble decay these elements are also re-

turned to the soil in a form available for
future crops.

Fourth—Inoculated legumes, by taking
their nitrogen from the air, save the soil.
When not inoculated they drain the soil of
its nitrogen just the same as wheat or tim-
othy or other non-leguminous plants.

Inoculated legumes contain more protein
matter than when not inoculated, greatly in-
creasing their feeding value.

Nitragin is the original soil inoculator. Sold
to farmers for 28 years. Experience is a big
asset.



NITRAGIN
ON
ALFALFA
The won-
derful no-
dules enrich
the soil and
insure a big
crop.

Transportation Is Paid at Prices Quoted, Except on Insecticides and Fertilizers

AID IN SELECTING FLOWER SEEDS

For Special Purposes

FOR SHADY PLACES

Antirrhinum	Cineraria	Ferns	Mimulus	Primula
Aquilegia	Delphinium	Foxglove	Myosotis	Salvia
Clarkia	Double Daisy	Godetia	Pansy	Viola Violets

SEED FOR GREENHOUSE PLANTS

Asparagus Fern	Begonia, Fibrs. Rtd.	Cineraria	Primula
Auricula	Calceolaria	Cyclamen	Schizanthus
Begonia, Tuberosa	Celosia, Cockscomb	Coleus	Gloxinia
			Vinca

BEDDING PLANTS—PERENNIAL

Argostemma	Columbine	Forget-Me-Not	Pentstemon	Sweet William
Candytuft	Coreopsis	Gaillardia	Salvia Patens	Wallflower
Carnation	Daisy, Shasta	Geum	Stocks, Perpetual	Viola Verbena
				Violet

BEDDING PLANTS—ANNUAL

Ageratum, Tall	Centaurea	Godetia	Marigold, French	Phlox
Aster	Clarkia	Gypsophila	Mignonette	Schizanthus
Balsom	Dianthus	Hunneemannia	Nasturtiums, Dwarf	Snapdragon, Dwarf
Calendula	Eschscholtzia	Linum, Scarlet Flax	Nigella	Statice
California Poppy	Four o'Clock	Lupins	Petunia	Statice, Ten Weeks
Candytuft	Gaillardia	Matricaria	Poppy	Viscaria Zinnia

TALL GROWING SHRUB PLANTS FOR GROUPING—PERENNIAL

Aster	Dahlia	Hollyhock	Lupin	Sweet Rocket
Canna	Delphinium	Larkspur	Poppy, Oriental	Wallflower
Canterbury Bell	Digitalis	Lavender	Salvia Splendens	
Castor Oil Bean	Hibiscus	Lobelia Cardinalis	Scabiosa Caucasica	

TALL GROWING PLANTS FOR GROUPING—ANNUAL

Amaranthus	Cosmos	Marigold, African	Poppy, Double	Snapdragon, Giant
Calliopsis	Helichrysum	Larkspur	Salpiglossis	Sunflower
Celosia, Tall	Kochia	Nicotiana	Scabiosa	Zinnia, Giant

LOW EDGING PLANTS—ANNUAL

Ageratum, Dwarf	Celosia, Dwarf	Matricaria, Golden	Pansy
Alyssum	Dianthus	Mignonette	Portulaca
Candytuft, Dwarf	Lobelia Compacta	Nemophila	Sweet Peas, Cupids

LOW EDGING PLANTS—PERENNIAL

Alyssum Saxatile	Centaurea	Forget-Me-Not	Pyrethrum, Golden
Border Pinks	Daisy, English	Poppy, Iceland	Feather
	Dianthus Plumarius	Primula	

PLANTS FOR ROCKERIES

Alyssum Saxatile	Iberis	Nasturtium	Statice Latifolia	Verbena
Forget-Me-Not	Lobelia, Trailing	Portulaca	Thunbergia	

EVERLASTING FLOWERS

Acroclinium	Helichrysum	Rhodanthe	Statice
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CLIMBING VINES—ANNUAL

Balloon Vine	Cardinal Climber	Gourd, Ornamental	Mina Lobata
Balsam Apple	Cypress Vine	Humulus (Jap Hop)	Moonflower
Scarlet Runner	Dolichos	Ipomoea, all kinds	Nasturtium, Tall
Canary-Bird Vine	Echinocystis	Morning Glory	Sweet Peas

CLIMBING VINES—PERENNIAL

Ampelopsis	Cobea Scandens	Kudzu-Vine	Smilax
Australian Pea Vine	Heliotrope	Lathyrus Latifolius	

How to Raise Flowers Successfully From Seed

Hardy means the plant will stand considerable frost, or practically all we have on the Pacific Coast.

Half Hardy means the plant will stand any light frost, but needs protection against very cold weather.

Annuals are plants that bloom the first year from seed, and the plant dies after one season.

Perennials are plants that bloom the second year from seed, and the plant lives and blooms during successive years. If sown in early Spring (February to March), many perennials will bloom the first year from seed.

Cultural Directions—It is better in most instances except hardy annuals to start the seed in shallow boxes about 4 inches deep, using very sandy soil with leaf mould so that

it will not bake, and provide for drainage by boring some holes in the bottom of the box. Set the boxes in a warm sheltered place, but protect from direct sunlight, as the seed is liable to be scorched up. When the plants have made the fourth leaf they should be pricked out, reset in another box or preferably in paper pots and when well started they should be transplanted in the garden. If the seed is to be sown directly in the garden, it should be done after soil is well worked and fertilized.

When up, the plants must be thinned from 2 to 12 inches, depending on the variety, otherwise they will be weak and spindling. Always keep the weeds out.

A common mistake in sowing flower seed is covering too deep. As a general rule half

an inch or less is the proper depth. Some seeds need only to be slightly pressed into the soil.

Seeds of the hardier annuals may be sown where they are to grow; but as a rule it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should

be watered frequently. Provide some support for all such annuals as require it.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked. Water often.

THE TIME TO SOW FLOWER SEEDS in Central and Northern California

This list enables one to tell at a glance when the various flower seeds may be sown. As some perennials will bloom the same season if sown early in the year, we therefore have stated the latest time in Spring they may be sown to bloom the same season. In regard to perennials that will not bloom the same year if planted in Spring, we have stated the time they should be sown in Fall to bloom the coming Summer; also the time

they may be sown in Spring to bloom early the following year. Several varieties of hardy annuals if shown in the Fall will come into bloom earlier than if shown in the Spring, even if the plants do not make much progress during the cold weather. Tender and half hardy annuals, if sown early, should be started in a warm, sheltered position and transplanted when the cold weather is over.

HA—Hardy Annual
HP—Hardy Perennial

HHA—Half Hardy Annual
HHP—Half Hardy Perennial

TA—Tender Annual
TP—Tender Perennial

Acroclonium HA.....	October to June	Hollyhock HP.....	Aug-Nov, Feb-May
Ageratum HHA.....	February to May	Honesty HP.....	August to March
Agrostemma HP.....	August to March	Humulus (Jap) HA.....	February to May
Alyssum HHA.....	All year round	Hunnemannia TA.....	April to May
Amaranthus TA.....	February to May	Ipomoea, Moonflwr HP.....	February to May
Asparagus Fern.....	August to May	Kudzu Vine TP.....	Sept. to May
Australian Vine HHP.....	August to May	Larkspur, Annual.....	Sept. to May
Aster HHA.....	February to June	Larkspur HP.....	August to March
Aster HP.....	August to March	Lathyrus HP.....	August to March
Balloon Vine TA.....	March 15 to May	Lavender HP.....	Aug-Nov, Feb-May
Balsam TA.....	February to June	Linum, Scarlet HP.....	February to June
Begonia.....	Feb.-Mr., Aug.-Oct.	Lobelia HHA.....	February to May
Calceolaria.....	June to August	Lupin, Annual.....	Sept. to March
Calendula HA.....	All year round	Lupin, Perennial.....	Aug-Nov, Feb-May
Calliopsis HA.....	February to June	Marigold HA.....	February to May
Campanula HP.....	Aug-Nov, Feb-May	Matthiola HA.....	Sept. to May
Canterbury Bells HP.....	Apr-Jne, Oct-May	Matricaria HHP.....	February to May
Canard-Bird Flwr TA.....	March 15 to June	Mignionette HA.....	All year round
Candytuft HA.....	All year round	Mimulus HHP.....	Sept. to March
Candytuft HP.....	Aug-Nov, Feb-May	Mina Lobata HHA.....	February to May
Carnation HP.....	October to April	Morning Glory HHA.....	February to May
Castor Bean HHP.....	March to June	Nasturtium TA.....	March 15 to June
Canna HP.....	February to June	Nemophila HA.....	Sept. to May
Cardinal Climber TA.....	April to May	Nicotiana HHA.....	February to May
Celosia (Ckscmb) TA.....	March to June	Nigella HA.....	February to May
Centaurea Sultan HA.....	October to April	Pansy (Spring) HA.....	August to Nov.
Cheiranthus HP.....	August to March	Pansy (Summer) HA.....	February to May
Chrysanthemum HA.....	February to June	Pentstemon HP.....	August to March
Cineraria HHP.....	Aug-Nov, Feb-May	Petunia TP.....	February to May
Clarkia HA.....	September to June	Phlox HA.....	Sept. to May
Cobaea HP.....	Aug-Nov, Feb-May	Poppy, Annual.....	Sept. to June
Coleus TP.....	March to May	Poppy, Perennial.....	August to March
Coreopsis.....	August to March	Portulaca HA.....	February to June
Cornflower HA.....	September to May	Primrose.....	Aug-Nov, Feb-May
Columbine HP.....	Aug-Oct, Feb-May	Primula, Chinese.....	March to May
Cosmos HHA.....	February to June	Pyrethrum, Gldn, HP.....	Sept. to May
Cypress Vine TA.....	April to May	Pyrethrum Hybrid HP.....	Aug-Nov, Feb-May
Dahlia, Single HHP.....	February to May	Rhodanthe HA.....	October to June
Dahlia, other sorts.....	February to March	Salpiglossis HHA.....	February to April
Daisy HP.....	Sept. to April	Salvia HHP.....	February to May
Daisy, Shasta HP.....	Aug-Nov, Feb-May	Scabiosa HA.....	August to May
Delphinium HP.....	August to March	Scabiosa Caucasica HP.....	Sept. to February
Dianthus, Pinks HP.....	February to May	Schizanthus HA.....	Sept. to May
Dianthus, Pinks HA.....	October to March	Schizanthus, Wntr, HA.....	July to September
Dolichos TA.....	April to May	Smilax TP.....	Aug-Oct, Feb-May
Echinocystis HA.....	April to May	Snapdragon (Spg) HA.....	August to Nov.
Eschscholtzia HA.....	Sept. to May	Snapdragon (Smr) HA.....	February to April
Forget-Me-Not HP.....	August to March	Stocks, Summer HA.....	February to May
Four o'Clock HA.....	February to June	Stocks, Winter HP.....	May to November
Foxglove HP.....	Aug-Nov, Feb-May	Sunflower TA.....	April to June
Gillardia, Annual.....	February to May	Sweet Peas HA.....	Sept. to June
Gillardia Perennial.....	Aug-Nov, Feb-May	Sweet Rocket HP.....	Aug-Nov, Feb-May
Geum HP.....	Aug-Nov, Feb-May	Sweet William HP.....	Aug-Oct, Feb-May
Gloxinia.....	Jan-Mar, June-Jly	Thunbergia HA.....	February to May
Godetia HA.....	Sept. to June	Verbena (Spg) HHP.....	August to Nov.
Gourds TA.....	April to May	Verbena (Smr) HHP.....	February to May
Gypsophila HA.....	Sept. to June	Vinca TP.....	Jan-Mar, Jne-July
Gypsophila HP.....	August to March	Viola (Tufted) HP.....	April to Nov.
Helichrysum HA.....	February to May	Viscaria HA.....	February to June
Heliotrope HHP.....	February to May	Wallflower HP.....	May-Jne, Sept-Feb
Hibiscus HHP.....	August to March	Zinnia HHA.....	February to June

Transportation Is Paid at Prices Quoted, Except on Insecticides and Fertilizers

VEGETABLE PLANTS AND ROOTS

It is quite a problem to pack and wrap plants and have them probably two or three days in the mail and reach customers in good condition.

Also the necessity for inspection causes such packages to be opened and contents examined by Horticultural Inspectors, and this examination is not always made at point of destination. This makes it necessary for plants to be rewrapped and reforwarded by the Horticultural Commissioner. This extra handling frequently injures them. Where plants are not entirely satisfactory when they reach our customers, we trust they will understand it is not our fault, because when we send out the plants they are always in good condition. Therefore plant orders are filled at customer's risk.

Where possible for customers to use lots of 100 Vegetable Plants of one variety, we suggest they order in flats, as there are about 100 plants in a flat, and these can be shipped by express or freight, charges for carrying collect. These flats sell at \$1.00 each, f. o. b. Sacramento.

Note—Where price is shown for 100 plants, this means for 100 of a single variety, and not to be made up of a number of varieties.

	Per 100	Per Doz.	Loose
Artichoke Plants, ready in Jany.....	\$1.50		\$.....
Asparagus Roots, ready in Jany.....	.35		2.25
(Special price per 1000)			
Cabbage Plants, Sept. to June.....	.20		.85
Cauliflower Plants, Sept. to June	.25		1.00
(Early Snowball and Dry Weather)			
Celery Plants, ready in April.....	.25		1.00
Eggplant, ready in March; New			
York Improved .....	.35		1.50
Pepper Plants, ready in March.....	.35		1.50
(Large Bell and Chinese Giant)			
Rhubarb Roots, ready Oct. to Mar.;			
Crimson Winter.....15c ea.; \$1.50 dz.			
Sweet Potato Plants, ready in Apr.			1.00
(\$7.50 per 1000)			
Parsley, Moss Curled.....	.25		1.50
Tomato Plants, ready in February	.35		1.50
(Sparks Earliana, New Stone			
and Ponderosa)			
Horseradish Roots .....	.50		
Onion Plants, Italian Red.....			
.....25c per 100; \$2.00 per 1000			
Special prices for large lots will be given on application			

NURSERY DEPARTMENT

GUARANTEE—We will warrant all trees and plants to be good and thrifty, but having no control over them after delivery to the transportation companies, or over the planting and care after they are received by the buyer, we will not be responsible in any other direction than as stated. We exercise great care to have all our nursery stock true to name. Nevertheless it is understood that should any stock prove otherwise, we shall not be liable for any sum greater than that paid us for only such stock as shall prove untrue.

PRICES quoted are f. o. b. Sacramento, except where noted. Where express office differs from postoffice be sure so to state.

Roses

December, January, February and March are the best months for planting, but should the season be favorable you can still plant during the early part of April. The plants sent out during these months are what we call dormant two-year-old budded plants. Roses give best results when planted in a fairly sunny location and in good, heavy sediment soil to which may be added some old manure or bone meal, but never use fresh manure. When planting straighten out all roots and as the dirt is filled in see that it is well packed around them; this keeps out the air and encourages a new growth of rootlets. Be sure that the Rose is planted lower than it grew, so that the points where it is budded shall be three or four inches below the surface.

Pruning

This should be done during the months of December, January and February; at that time the bushes are in a dormant condition. Cut just above a prominent but dormant bud that is pointing outward.

Roses

	Each
ANGELE PERNET—Reddish Apricot.....	.75
CECILE BRUNNER—Baby Rose Pink.....	.50
CLEVELAND—Pink and Rose.....	.50

CONSTANCE—Canary Yellow.....	.50
DAME EDITH HELEN—Pink.....	.75
F. K. DRUSCHKI—White Thinged Pink ..	.50
FEU JOS. LOOYMANS—Golden Buff.....	1.00
GEORGE DICKSON—Dark Red.....	.50
GEN. MACARTHUR—Brilliant Red.....	.50
GOLDEN EMBLEM—Golden Yellow.....	.60
GOLDEN OPHELIA—Golden Yellow.....	.50
HADLEY—Velvety Crimson.....	.50
HERBERT HOOVER—Dark Pink.....	1.50
HOOSIER BEAUTY—Rich Crimson.....	.50
ISOBEL—Single Orange Scarlet.....	.50
INDEPENDENCE DAY—Apricot.....	.50
IRISH FIREFLAME—Single Gold and	
Apricot .....	.50
IMPERIAL POTENTATE—Carmine.....	.50
JOHN RUSSEL—Velvety Crimson.....	.50
JULIET—Deep Rose.....	.50
JULIEN POTIN—Primrose Yellow.....	1.00
K. A. VICTORIA—Best White.....	.50
KILLARNEY—Deep Sea Shell Pink.....	.50
K. of K.—Solid Scarlet.....	.50
LA FRANCE—Silvery Pink.....	.50
LADY HILLINGTON—Deep Golden	
Yellow.....	.50
LADY MARGARET STEWART—Coppery	
Yellow.....	.75
LAFAYETTE—Cherry Red.....	.50
LORD CHARLEMONT—Best Red.....	.75
LOS ANGELES—Flaming Pink.....	.50
LOUISE C. BRESLAU—Shrimp Pink	
and Orange.....	.50
MME. BUTTERFLY—Pink Shaded	
Apricot .....	.50
MME. CAROLINE TESTOUT—Silvery	
Pink.....	.50
MME. EDOUARD HERRIOT—Coral	
Pink.....	.50
MRS. AARON WARD—Golden Orange.....	.50
MRS. CHAS. RUSSELL—Rosy Pink.....	.50
MRS. HENRY BOWLES—Pink Flushed	
Salmon.....	.50
MARGARET MCGREDY—Carmine Rose	
MISS LOLITA ARMOUR—Yellow and	
Orange.....	.50
OPHELIA—Light Pink.....	.50
PAPA GONTIER—Deep Red.....	.50
PADRE—Coppery Pink.....	.50
PINK MAMAN COCHET—Pink.....	.50
RADIANCE—Pink.....	.50
RED RADIANCE—Rich Red.....	.50
ROSE MARIE—Rose Red.....	.50
REV. F. PAGE ROBERTS—Yellow and	
Orange.....	.50

Transportation Is Paid at Prices Quoted, Except on Insecticides and Fertilizers

SOUV. DE GEO. PERNET—Coppery	
Gold	.75
SOUV. DE CLAUDIUS PENOYAL—	
Crimson	.50
SHOT SILK—Coppery Rose	.50
SUNBURST—Cadmium Yellow	.50
SOUV. DE H. A. VERSHUREN—Apri-	
cot Yellow	.50
TALISMAN—Gold, Apricot, Carmine	1.25
THE QUEEN ALEXANDRA—Intense	
Vermillion	.50
ULRICH BRUNNER—Cherry Red	.50
WHITE KILARNEY	.50
WM. F. DREER—Coppery Pink	.50

Climbing Roses

BELLE OF PORTUGAL—Pink Flushed	
Yellow	.50
CLG. CECIL BRUNNER—Yellow	.50
CLG. CECIL BRUNNER—Pink	.50
CLG. CHEROKEE—Pink	.50
CLG. CRIMSON BABY RAMBLER	.50
CLG. FORTUNES—Yellow	.50
CLG. GOLDEN EMBLEM—Golden	

Yellow	1.00
CLG. HOOSIER BEAUTY—Brilliant	
Crimson	.50
CLG. K. A. VICTORIA—Best White	.50
CLG. LADY HILLINGDON—Deep	
Golden Yellow	.50
CLG. LOS ANGELES—Flaming Pink	.50
CLG. MME. CAROLINE TESTOUT—	
Silvery Pink	.50
CLG. MRS. AARON WARD—Golden	
Orange	.50
CLG. MME. EDOUARD HERRIOT—	
Coral Pink	.50
CLG. MME. BUTTERFLY—Pink Shaded	
Apricot	.50
CLG. MARECHAL NEIL—Yellow	.50
CLG. PAUL'S SCARLET—Intense	
Scarlet	.50
CLG. PAPA GONTIER—Deep Red	.50
CLG. SILVER MOON—Cream	.50
CLG. SUNBURST—Cadmium Yellow	.50
CLG. ROSE MARIE—Rosy Red	.50
CLG. WHITE MAM COCHET	.50

Where a dozen or more Roses are ordered, reduction of 5c each is allowed.

FRUIT TREES AND SMALL FRUITS

APPLES Each 10

4 to 6 feet	\$0.65	\$6.00
Newtown Pippin	Gravenstein	Red Astrachan

APRICOTS

4 to 6 feet	\$0.65	\$6.00
Blenheim	Royal	Tilton

ALMONDS

4 to 6 feet	\$0.65	\$6.00
I X L	Ne Plus Ultra	Nonpareil

CHERRIES

4 to 6 feet	\$0.75	\$7.00
Bing	Black Tartarian	Royal Ann

NECTARINES

4 to 6 feet	\$0.65	\$6.00
Quetta	New Boy	

PEACHES

4 to 6 feet	\$0.65	\$6.00
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FREESTONE

Early Crawford	Elberta	Hale's Early
Mayflower	J. H. Hale	

CLINGSTONE

Phillips

PEARS

4 to 6 feet	\$0.65	\$6.00
Bartlett	Beurre Bosc	Winter Nelis

PLUMS

4 to 6 feet	\$0.65	\$6.00
Beauty	President	Wickson
		Santa Rosa

PRUNES

4 to 6 feet	\$0.65	\$6.00
French	Imperial	Tragedy

FIGS

4 to 6 feet	\$0.65	\$6.00
California Black, or Mission	White Adriatic	

WALNUTS

4 to 6 feet	each	\$1.50
Eureka	Franquette	

PERSIMMONS

4 to 6 feet	each	\$2.00
	Hachiya	

ORANGES

4 to 5 feet, balled	each	\$3.59
	Washington Navel	

LEMONS

4 to 5 feet, balled	each	\$3.59
	Eureka	

GRAPE FRUIT—POMELO

4 to 5 feet, balled	each	\$3.50
	Marsh's Seedless	

STRAWBERRIES

	Doz.	100
Oregon Plum	\$0.25	\$1.50
Mastodon	1.00	5.00

CURRENTS

	Each	10
Cherry Currants	\$0.25	\$2.00

GOOSEBERRIES

	Each	10
Champion or Downing	\$0.30	\$2.50

BLACKBERRIES

	Each	10
Cory's Thornless	\$0.25	\$2.00

RASPBERRIES

St. Regis	\$0.20	\$1.50
La France	.30	2.50

We also raise and Carry Ornamental Trees and Shrubs, and will be pleased to give descriptions and quote prices on request.

Miscellaneous

WOODEN LABELS

(3½-inch copper-wired, painted)

	100	1000
Tree labels	\$0.40	\$3.00
6-inch Pot labels	.30	3.00
4-inch Pot labels	.25	2.00

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TIME TO PLANT VEGETABLES IN CENTRAL AND NORTHERN CALIFORNIA

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Artichoke.....	X	X	X	X	X	X				X	X	X
Asparagus.....		X	X									
Beans.....			X	X	X	X	X					
Beets.....	X	X	X	X	X	X	X	X	X	X	X	X
Cabbage.....	X	X	X	X	X	X	X	X	X	X	X	
Carrots.....	X	X	X	X	X	X	X	X	X	X	X	X
Cauliflower.....					X	X	X	X	X	X		
Celery.....		X	X	X	X							
Chicory.....	X		X	X	X	X	X	X	X	X		
Corn.....			X	X	X	X	X					
Cucumbers.....				X	X	X	X					
Eggplant.....				X	X	X						
Endive.....	X	X	X	X	X	X	X	X	X	X		
Kale.....	X	X	X	X			X	X	X	X		
Kohl-Rabi.....		X	X	X	X	X	X	X	X	X		
Leek.....							X	X	X	X	X	X
Lettuce.....	X	X	X	X	X	X	X	X	X	X	X	X
Melons.....				X	X	X	X					
Mustard.....	X	X	X	X	X	X	X	X	X	X	X	X
Okra.....			X	X	X	X						
Onions.....	X	X	X	X	X			X	X	X	X	X
Parsnips.....	X	X	X	X	X	X	X	X	X	X	X	X
Peas.....	X	X	X	X	X				X	X	X	X
Peppers.....			X	X	X	X						
Potatoes.....	X	X	X	X	X		X	X				X
" Sweet.....			X	X	X	X						
Pumpkins.....				X	X	X	X					
Radishes.....	X	X	X	X	X	X	X	X	X	X	X	
Rhubarb.....	X	X	X	X	X	X						
Salsify.....		X	X	X	X	X	X					
Spinach.....	X	X	X	X	X				X	X	X	X
Squash.....				X	X	X	X					
Tomatoes.....				X	X	X						
Turnips.....	X	X	X	X	X	X	X	X	X	X		

X—Indicates months in which the seed should be planted for best results.

FLOWERING PLANTS—OUR OWN GROWN

	Per Doz.	
Asters (separate colors).....	\$.50	Ready in Spring
Canterbury Bell (Campanula).....	.75	All Year Round
Chrysanthemums, Mixed.....	1.50	Ready in Spring
Coreopsis.....	.75	All Year Round
Cosmos.....	.50	Ready in Spring
Daisy, Double.....	.50	Ready in Spring
Delphinium.....	1.50	All Year Round
Digitalis (Foxglove).....	1.50	All Year Round
Forget-Me-Not.....	.50	All Year Round
Gaillardia.....	1.25	All Year Round
Geum, Mrs. Bradshaw.....	1.50	Ready in Spring
Hollyhock.....	.75	All Year Round
Marigold (Calendula).....	.50	All Year Round
Marigold, Dwarf French.....	.50	Ready in Spring
Marigold, Tall African.....	.50	Ready in Spring

	Per Doz.	
Pansies, Finest Mixed.....	.50	Ready in Spring
Pentstemon.....	1.50	All Year Round
Petunia, Giant of California.....	1.00	Ready in Spring
Salvia, Scarlet Sage.....	.50	Ready in Spring
Scabiosa, Mourning Bride.....	.50	Ready in Spring
Shasta Daisy.....	.50	All Year Round
Snapdragon.....	.50	All Year Round
Stocks.....	.50	All Year Round
Straw Flowers.....	.50	Ready in Spring
Sweet William, Double.....	1.25	All Year Round
Verbena.....	.50	All Year Round
Violets, Large California.....	.50	All Year Round
Wallflower, Single.....	.50	All Year Round
Zinnia (separate colors in Giant variety).....	.50	Ready in Spring

Transportation Is Paid at Prices Quoted, Except on Insecticides and Fertilizers

VALLEY SEED CO.
1006 J Street, SACRAMENTO, CAL.

At prices quoted in our catalog we deliver everything listed (EXCEPTING INSECTICIDES) at your railroad station or Post Office. We pay the freight, express, or postage, reserving the right to send the goods to you the cheapest way. All small packages will be mailed.

NOTE
Extra order sheets
and Return Envel-
opes sent on Ap-
plication.

AMOUNT ENCLOSED

Postal Money Order \$_____

Express Money Order _____

Draft _____

Currency _____

Coin _____

Postage Stamps . . . _____

*Total . . \$*_____

Forward goods by _____

State whether by mail, express, or freight

[illegible]

CATALOG PRICES INCLUDE DELIVERY

[illegible]

CATALOG PRICES INCLUDE DELIVERY

From.....
Street.....
City.....
State.....

VALLEY SEED CO.,

1006 J STREET,

P. O. Box 1277

SACRAMENTO, CAL.

WEIGHT OF VARIOUS SEEDS PER BUSHEL

	Per Bshl.
Alfalfa	60 lbs.
Barley	48 lbs.
Beans	60 lbs.
Blue Grass—	
Kentucky	14 lbs.
English	24 lbs.
Buckwheat	48 lbs.
Canary Seed	60 lbs.
Cheat	34 lbs.
Clover Seed	60 lbs.
Corn, Wheat	60 lbs.
Corn, Shelled	56 lbs.
Charcoal	22 lbs.
Perennial Rye	26 lbs.
Hungarian	48 lbs.
Hemp Seed	44 lbs.
Flax Seed	56 lbs.

	Per Bshl.
Meadow Fescue	24 lbs.
Millet	50 lbs.
Oats	32 lbs.
Onion Sets	32 lbs.
Orchard Grass	14 lbs.
Peas, Smooth	60 lbs.
Peas, Wrinkled	56 lbs.
Potatoes	60 lbs.
Rape	60 lbs.
Rye	56 lbs.
Red Top	14 lbs.
Red Top, Solid Seed	42 lbs.
Spelt	40 lbs.
Timothy	45 lbs.
Vetches	70 lbs.
Wheat	60 lbs.

Quantity of Seeds Required to Produce a Given Number of Plants and Sow an Acre

Alfalfa—15 to 20 lbs. to the acre.
 Artichoke—1 oz. to 500 plants, 6 ozs. to acre.
 Asparagus—1 oz. to 800 plants, 1 lb. to acre.
 Asparagus Roots—5000 to 10,000 to acre.
 Barley—2 to 2½ bushels to the acre.
 Beans, Dwarf—1 lb. to 100 feet of drill, ½ bushel to the acre.
 Pole—1 lb. to 50 hills, ½ bushel to acre.
 Beet, Garden—1 oz. to 50 feet of drill, 5 lbs. to the acre.
 Mangel—1 oz. to 50 feet of drill, 5 lbs. to the acre.
 Broccoli—1 oz. to 2000 plants, 4 ozs. to acre.
 Brussels Sprouts—1 oz. to 2000 plants, 4 ozs. to the acre.
 Broom Corn—In drills, 15 lbs. to the acre.
 Buckwheat—½ to 1 bushel to the acre.
 Cabbage—1 oz. to 2000 plants, 4 ozs. to acre.
 Carrot—1 oz. to 150 ft. of drill, 3 lbs. to acre.
 Cauliflower—1 oz. to 2000 plants, 4 ozs. to the acre.
 Celery—1 oz. to 5000 plants, 4 ozs. to acre.
 Cheat—2 bushels to the acre.
 Chicory—4 lbs. to the acre.
 Clover, Alsike and White—6 to 8 lbs. to acre.
 Crimson Trefoil—10 to 15 lbs. to the acre.
 Red—10 to 12 lbs. to the acre.
 Collards—1 oz. to 2000 plants, 4 ozs. to acre.
 Corn—Wheat—2 bushels to the acre.
 Corn, Pop (shelled)—3 to 10 lbs. to the acre.
 Sweet or Field—Hills, 12 to 20 lbs. to acre.
 For Soiling—Drills, 2 bushels to the acre.
 Cress—½ oz. to 100 ft. of drill, 1 lb. to acre.
 Cucumber—1 oz. to 100 hills, 2 to 3 lbs. to the acre.
 Eggplant—1 oz. to 2000 plants, 4 ozs. to acre.
 Endive—1 oz. to 150 ft. of drill, 4 lbs. to acre.
 Flax—Broadcast, ¾ bushel to the acre.
 Grass, Blue:
 Kentucky—2 bushels to the acre.
 Meadow Fescue—1 bushel to the acre.
 Mixed Lawn—5 to 10 lbs. to the acre.
 Red Top—Chaff, 2 bushels to the acre.
 Red Top—Solid seed, 12 to 15 lbs. to acre.
 Timothy—12 to 15 lbs. to the acre.

Grass, Blue (Continued):
 Orchard, Perennial Rye, Fowl, Meadow, Wood Meadow—2 bushels to the acre.
 Horseradish Roots—10,000 to 15,000 to acre.
 Kale—1 oz. to 5000 plants, 4 ozs. to acre.
 Kaffir Corn—In drills, 6 to 8 lbs. per acre.
 Kohl-Rabi—1 oz. to 100 ft. of drill, 4 lbs. to the acre.
 Leek—1 oz. to 100 ft. of drill, 4 lbs. to acre.
 Lettuce—1 oz. to 150 ft. of drill, 3 lbs. to acre.
 Millet—For seed, 20 lbs.; for hay, 30 lbs. to the acre.
 Melon, Musk—2 ozs. to 100 hills, 1 lb. to acre.
 Water—4 ozs. to 100 hills, 1 lb. to acre.
 Oats—2 to 3 bushels to the acre.
 Okra—1 oz. to 100 ft. of drill, 8 lbs. to acre.
 Onion Seed—For sets, 60 to 85 lbs. to acre; 1 oz. to 150 ft. of drill, 3 to 4 lbs. to acre.
 Onion Sets—1 qt. to 40 ft. of drill, 8 bushels to the acre.
 Parsnips—1 oz. to 150 ft. of drill, 3 lbs. to the acre.
 Parsley—1 oz. to 150 ft. of drill, 3 lbs. to acre.
 Peas, Field—2 bushels to the acre.
 Garden—1 lb. to 100 ft. of drill, 1 to 2 bushels to the acre.
 Pepper—1 oz. to 1500 plants.
 Pumpkin—½ lb. to 100 hills, 3 to 4 lbs. to the acre.
 Radish—1 oz. to 100 ft. of drill, 10 lbs. to the acre.
 Rape—3 to 5 lbs. to the acre.
 Rye—1½ to 2 bushels to the acre.
 Salsify—1 oz. to 100 ft. of drill, 6 lbs. to acre.
 Speltz—100 lbs. to the acre.
 Spinach—1 oz. to 100 ft. of drill, 8 lbs. to acre.
 Sugar Cane—In drills, 10 lbs. to the acre; broadcast, 30 lbs. to the acre.
 Sunflower—8 lbs. to the acre.
 Squash, Summer—4 ozs. to 100 hills, 3 lbs. to the acre.
 Turnip—1 oz. to 100 ft. of drill, 3 lbs. to acre.
 Winter—8 ozs. to 100 hills, 4 lbs. to acre.
 Tomato—1 oz. to 2000 plants, 4 ozs. to acre.

LADINO CLOVER

(*Trifolium Repens*)

This is an ideal dairy pasture crop and also very valuable as greens for poultry. It will grow very satisfactorily on land that is not suitable for Alfalfa, in other words, it succeeds on shallow soil or soil with a high water table and even where alkali is present. Its roots are comparatively shallow, branching at the crown just above the ground. They send out runners and these runners branch and take root every few inches. The stems, which lie close to the ground, are held by the many roots and will not be pulled off or eaten by stock while pasturing.

It is suggested by many Dairymen to plant Rye Grass or Bluegrass with Ladino as such a mixture reduces the possibility of bloating. If Ladino is sown alone about 5 pounds to the acre—if sown with the grasses about 3 pounds of Ladino and 8 pounds mixed of the two grasses above mentioned.

LADINO Price \$1.00 per pound. Write for quantity price.

Proper Nourishment The Secret of Gardening Success

AMAZING results can be obtained by use of a complete, scientifically balanced plantfood, specially prepared.

Such a food is Vigoro. It gives plants all the elements they require, each in the proper proportion.

Clean, odorless, pleasant to handle and can be sown by hand like grass seed. Feed your lawns, flowers, vegetables, shrubs, and trees with Vigoro to give them the nourishment they absolutely require for healthy, vigorous growth.

Full directions in each bag.



VIGORO

Specially prepared plant food

5 LB. CARTON - 60c	50 LB. BAG - \$3.75
25 LB. BAG - \$2.00	100 LB. BAG - \$5.00

F. O. B. SACRAMENTO

VALLEY SEED CO.

1006 J STREET

SACRAMENTO • • CALIFORNIA